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ABSTRACT

Identified in this dissertation are the major influences on American preschool education: (1) the Froebel kindergarten, (2) the Montessori movement, (3) the Child Study movement, and (4) Project Head Start. Each movement is described according to history, aim, curriculum, materials, and methods. Criteria for each section of the contemporary preschool were identified by analysis and synthesis of opinions of four current authoritative sources in preschool education. The criteria were then compared to the description of each preschool movement to identify its influence. The Froebel kindergarten contributed the view that education is a process of growth and advocated using the method of self-activity through play. The Montessori movement put emphasis on responsibility to be given to children for care of self and environment. The Child Study movement resulted in increased attention to the physical, social, and mental developmental needs of children. Head Start influence can only be predicted, but effective factors may be increased attention to social services, health services, parent and volunteer involvement, and the effort to adapt a program to the needs of a specific group of children. A bibliography and chronology tables of significant developments in preschool movements are included. (DR.)

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A STUDY OF THE INFLUENCE OF CERTAIN PRESCHOOL EDUCATIONAL MOVEMENTS ON CONTEMPORARY PRESCHOOL PRACTICES

by

Velma E. Schmidt

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

I. THE PROBLEM

Introduction of the problem. The current interest in the education of young children in America has been influenced by a number of European and American educators and educational philosophies during the last century. Ideas concerning educating young children preceded the formal establishment of kindergartens.

American preschool education today is the result of influences of Froebel, Montessori, Susan Blow, and Patty Hill, to name a few. Through financial support of the federal government in the Head Start program, interest in educating young children and in improving these programs has increased. Preschool education has changed through the years. Certain ideas and practices have been retained, while others have been dropped and additional ideas incorporated.

Recent research shows the importance of the early years in the learning process and will undoubtedly influence the thinking of many educators who are involved in developing and improving preschool education. Greater educational opportunities for the four- and five-year-old child will probably be provided in the future.

Because of the increased interest in educating young children, four preschool movements were selected for the purpose of analyzing how these movements have affected the educational programs and just what contributions they have made to preschool education as it exists in America today.

Statement of the problem. This study is a descriptive historical study. The purpose of this study was to identify the major influences that the four selected preschool movements have had on American preschool education.

Procedures of the study. Each of the four selected preschool movements was described according to the following outline: the history, the aim, the curriculum, materials, and the methods. Criteria for each section of the contemporary preschool were identified by analyzing and then synthesizing four current authoritative sources in preschool education. The criteria were then compared to the description of each selected preschool movement to identify the influence of each movement.

Limitations of the study. Preschool movements not included in the four selected movements; namely, the Froebel kindergarten, the Montessori movement, the child study movement, and Project Head Start, were excluded in this study. The influences on the contemporary preschool of each selected preschool movement were limited to the aim, the curriculum, the materials, and the methods.

II. DEFINITIONS OF TERMS USED

Preschool education. The formal education previous to first grade is included in preschool education.

Curriculum. The curriculum includes all of the experiences under the guidance of the school.

Child study movement. This movement is the investigation of the growth and development of children as directed by the belief that the curriculum and instructional procedures should be the result of an intimate understanding of the nature, needs, and interests of children.[1]

III. OVERVIEW OF THE STUDY

The four selected preschool movements are: the Froebel kindergarten, the Montessori movement, the child study movement, and Project Head Start.

Each selected preschool movement was described in a separate chapter according to the following outline: the history of the movement; the description of the movement as to its aim, curriculum, materials, and methods. The influences on the American preschool education of the selected movements were analyzed in Chapter VI. The influences were analyzed according to the aim, curriculum, materials, and methods of each selected preschool movement.

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[1] Carter V. Good (ed.), Dictionary of Education (New York: McGraw-Hill Book Company, Inc., 1959), p. 91.

CHAPTER II

THE FROEBEL KINDERGARTEN

I. HISTORY OF THE FROEBEL KINDERGARTEN

The crowning achievement of Friedrich Froebel (1782-1852) was the kindergarten.

The fundamental characteristics of Froebel's life were self-contemplation, self-analysis, and self-education.[1] With a limited elementary education, Froebel educated himself through reading available books; observing, in particular nature and children; spasmodic attendance at several universities; and through varied kinds of employment. The problem of choosing a vocation was solved when he accepted a position as teacher of a Pestalozzi model school in Frankfurt. Froebel's early success as a teacher convinced him to become a teacher. He learned his basic educational ideas from studying with Pestalozzi.

The German thinkers of his day, Fichte, Schelling, and Krause, influenced Froebel's philosophy of education. Generally, Froebel sought unity in diversity and an internal connection of the inner and the outer. He believed that nature connected the individual with the spiritual as he strove toward unity with God.[2] The mind, the inner, was connected to the environment; the outer, through interaction with it. Education was to recognize the essential stages of development of the individual and his relations to his surroundings.[3]

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[1] Emilie Michaelis and H. K. Moore (trans.), Autobiography of Friedrich Froebel (London: Swan Sonnenschein and Company, 1891), p. 11.

[2] S. F. Fletcher and J. Welton, Froebel's Chief Writings on Education (London: Edward Arnold and Company, ca. 1912), p. 7.

The most notable of several schools begun by Froebel for boys of elementary school age, was the one at Keilhau, established in 1817. It was here that Froebel experimented informally and developed his own educational ideas. His aim was to "improve education by a more human, related, affiliated, connected treatment and consideration of the subjects of education."[4] At Keilhau he worked out his concept of self-activity.[5]

Froebel had been thinking about the education of children from the ages of three to seven years for a long time. His experience in directing the orphanage at Burgdorf for young children led him to visit the Berlin day-nurseries. After his return from Berlin, the idea of an institution for the education of little children had fully taken shape in his mind.[6] He felt that mothers were not able to educate the young children adequately in the home.

The first kindergarten was established by Froebel for village children one to seven years of age in an old powder mill in Blankenburg,

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[3] _Ibid._, p. 13.

[4] Jessie White, _The Educational Ideas of Froebel_ (London: University Tutorial Press Limited, 1905), p. 13.

[5] Denton J. Snider, _The Life of Frederick Froebel_ (Chicago: Sigma Publishing Company, 1900), p. 192.

[6] Michaelis, _op. cit._, p. 137.

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Germany in 1837. Here he worked out his gifts and occupations and the general curriculum. His educational ideas were always changing. The chief educational principles of Froebel were, to a large extent, assignable to his direct observation of the natural activities of children.[7] At Marienthal he established his most successful kindergarten with training for women teachers.

After 1844, Froebel wrote and lectured throughout Germany to spread his ideas, to establish kindergartens, and to give training courses for teachers. He usually introduced his ideas by playing games and using his gifts with children.[8] Froebel's kindergarten came to be associated with the revolutionists of the middle 1800's because of the freedom he permitted in the kindergarten.[9] The Prussian Minister of Education, in 1851, issued an edict prohibiting the kindergartens. This edict was rescinded ten years later. The prohibition caused private kindergartens to be established in Germany[10] and Germans who were interested in spreading the kindergarten, to emigrate to other countries.[11] Froebel's wife made Hamburg the center to disseminate the kindergarten after his death.[12] The Baroness von Marenholtz-Bülow, an educated and influential woman, who studied under Froebel, was instrumental in promoting the kindergarten idea in Europe and America. By 1879, the kindergarten had extended over Europe.

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[7] Frederick Eby and Charles F. Arrowood, The Development of Modern Education (New York: Prentice-Hall, Inc., 1934), p. 797.

[8] White, op. cit., p. 75.

[9] Snider, op. cit., p. 352.

[10] Henry Barnard (ed.), Kindergarten [illegible] Child Culture Papers (Hartford: Office of Barnard's American Journal of Education, 1890), p. 6.

[11] Evelyn Lawrence (ed.), Friedrich Froebel and English Education (London: University of London Press Limited, 1952), p. 24.

Froebel had stated that the spirit of the American nationality was the only one in the world with which his creative method was in complete harmony.[13] Disciples of the Froebelian system established the kindergarten idea in America. The most notable initial developments were: the first German kindergarten in Watertown, Wisconsin, established by Mrs. Carl Schurz in 1855; the first English kindergarten in Boston by Elizabeth Peabody in 1860; and the first public school kindergarten in St. Louis by Susan Blow in 1873. Elizabeth Peabody is credited with promoting the kindergarten in the United States.

Between 1880 and 1890 the Froebel kindergartens were accepted in America without question. The kindergartens served as a philanthropy for organizations, churches, and welfare agencies.[14] Gradually, kindergartens were incorporated into the school system. After 1890, a more critical attitude toward the Froebel system emerged. Patty Hill stated that the Froebel representatives who came to America had a far more fixed and inflexible conception of kindergarten education than Froebel's concept of kindergarten.[15] As the principles of the child study movement began to be recognized, the conflict between the conservative and liberal sides of the kindergarten grew more intense. By 1910, the two sides united forces, determined to utilize the most recent developments of research in childhood education.[16]

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[12] Barnard, op. cit., p. 134.

[13] Ibid., p. 11.

[14] Nina C. Vandewalker, The Kindergarten in American Education (New York: The Macmillan Company, 1908), p. 58.

The chronological lists in Appendix A indicate the significant developments of the Froebel kindergarten in Germany and America.

II. AIM OF THE FROEBEL KINDERGARTEN

The aim of Froebel's kindergarten was to make the needs and demands of the child's world correspond to the present stage of his development.[17] The young child's environment and activities were planned to parallel his needs at this stage of life.

Froebel believed that a child who was placed in the proper surroundings beginning at birth, and whose natural instincts were guided at his particular stage of development, would develop his full physical and intellectual qualities. Much of his writing was directed to mothers. He tried to help them in supplying the proper surroundings and training. The kindergarten was to be an extension of the kind of training begun in the home.

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[15] Patty Smith Hill, Kindergarten, Reprint from the American Educator Encyclopedia, 1942 (Washington, D.C.: Association for Childhood Education International, 1967), p. 1950.

[16] Ibid., p. 1974.

[17] Irene M. Lilley, Friedrich Froebel (Cambridge: Cambridge University Press, 1967), p. 97.

Froebel believed that education was the training of a child to express the inward law in his actual life.[18] The child's inward law, his mind, was related to nature, humanity, and religion. The kindergarten was to aid the child to live in nature as part of humanity in the knowledge that both nature and humanity belong to God. As each child became capable of expressing the inward law at a higher level through education, mankind would be helped to greater progress.[19]

Froebel selected the name kindergarten to symbolize the growth and development of the young child as he was nurtured in the kindergarten just as plants grew when they were nurtured and given care.

III. CURRICULUM OF THE FROEBEL KINDERGARTEN

The basic principles of Froebel's kindergarten were self-activity, connectedness, continuity, creativeness, physical activity, and harmonious surroundings.[20] The purpose of each principle is summarized as follows:[21]

Principle	Purpose
self-activity	to use inner power to learn and concentrate
connectedness	to understand the unity with nature, man, and God

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[18] William H. Herford, The Student's Froebel (Boston: D. C. Heath and Company, 1896), p. 2.

[19] Ibid., pp. 162-68.

[20] H. Courthope Bowen, Froebel and Education Through Self-Activity (New York: Charles Scribner's Sons, 1892), p. 180.

[21] Lawrence, op. cit., pp. 127-65.

creativeness	to make an idea his own
physical activity	to use bodily activity with a purpose
harmonious surroundings	to give poise and security through an atmosphere of love and peace

Through application of these principles, the child developed his mental and physical powers, acquired knowledge, and developed skills in applying the knowledge.[22]

Froebel developed his curriculum from the activities and materials used in the homes, and on the basis of children's interests and experiences. The main characteristic of the curriculum content was continuity. His curriculum consisted of gifts and occupations, the *Mother and Nursery Songs*, games, nature study, and religious training.

The gifts and occupations were designed to correspond to the development of the child and to carry out his basic principles. The gifts were to develop the child's intellectual power and knowledge while the occupations were used to produce skill in the use of the knowledge the child had acquired.[23]

The purpose of songs and activities was to train the body, limbs, and senses of quite small children. Development of limbs, senses, and mental powers was stressed.[24]

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[22] Bowen, *op. cit.*, p. 124.

[23] *Ibid.*, p. 102.

[24] Snider, *op. cit.*, p. 321.

Froebel's games were to help the child relate the inner to the outer activity and to make the child conscious that through movement he could attain something.

The study of nature was to train the child to see God through nature, and to trace everything back to God. The child learned the regularity of organic formations and the peace of nature. As the child's heart and sympathies were enlarged through the care of plants and animals, Froebel hoped that these attitudes would be transferred to man.[25]

The religious training was inherent in the moral values taught in the kindergarten. In addition, the sessions opened and closed with religious worship. Froebel believed that a union with God grows out of a union with other human beings.[26]

Susan Blow, a leading American exponent of Froebel, emphasized the symbolism in Froebel's curriculum in her book.[27] She described the American curriculum as including garden work, songs, games, stories, talks, lunch and exercises in the gifts and occupations.[28]

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[25] Barnard, _op. cit._, p. 220.

[26] _Ibid._, p. 222.

[27] Susan E. Blow, _Symbolic Education_ (New York: D. Appleton and Company, 1894).

[28] Barnard, _op. cit._, p. 596.

IV. MATERIALS OF THE FROEBEL KINDERGARTEN

Gifts and occupations. The gifts and occupations, developed by Froebel between 1835 and 1850, were the playthings of childhood. They showed his mathematical mind. The gifts had to do with taking in while the occupations had to do with giving out.[29] Followers of Froebel devised detailed lists of the gifts, the knowledge to be gained from using them, and the gifts and occupations that were to be used together.

The gifts were:

1. Box of six woolen balls (primary and secondary colors)
2. Boxed wooden ball, cylinder, and cube, with suspending frame
3. Boxed two-inch cube divided into eight one-inch cubes
4. Boxed two-inch cube divided into eight brick shaped blocks
5. Boxed three-inch cube divided twice in each direction, forming twenty-seven one-inch cubes, three of which were divided into halves, and three into quarters
6. Boxed three-inch cube, divided to form twenty-seven solid oblongs, of which three were divided into halves to form four-sided prisms, and six into halves to form square half-cubes[30]

Froebel planned a definite sequence. Each gift was to contain the next. Each object was to appear as a self-contained whole and as a part of a greater whole. The gifts represented the fact that all understanding of life consisted in so harmonizing the outer experience and the inner thought.[31] The gifts followed a sequence of geometric forms, from wholes to parts, which provided a basis for mathematical understanding, stories, conversation, and construction. The gifts first established spatial relationships and proceeded to sensory and language training.[32]

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[29] Bowen, op. cit., p. 147.

[30] Ibid., pp. 138-43.

The occupations were:

Occupation	Materials
tablet laying	wooden colored squares and triangles
stick laying	round and circular sticks of various lengths
ring laying	metal whole and half rings
drawing	sand, checkered paper, plain paper, or slates
perforating	ruled white and colored cardboard and paper, checkered paper, pricking needle with handle
sewing	colored wools, silks and cottons, perforated cards with pictures, patterns, letters, or maps, squared perforated paper, cardboard objects to be decorated with embroidery, worsted and embroidery needle
paper cutting	squared, ruled and plain colored and white paper
paper-weaving (mat-plaiting)	colored strips and bases for interweaving

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[31] Fletcher, _op. cit._, p. 202.

[32] Lilley, _op. cit._, p. 98.

Occupation	Materials
slat-weaving or plaiting	smooth and flexible strips of wood and jointed slats
paper-lacing	colored paper strips
paper folding (two and three dimensions)	colored and white geometric shapes
pea work	pointed sticks or wires fastened with soaked peas, cork, or wax
clay modeling	clay and clay boards
miscellaneous occupations	work with color brush, sand modeling, bead threading, paper twisting, thread laying, Japanese straw-work, basketry, cane weaving, stenciling[33]

The occupations were more abstract activities with a sequence from solids and surfaces to lines and points. The materials were easily changed in form. The occupations connected the artistic dexterity with the cultivation of intelligence.[34] The occupations were to provide forms of beauty, knowledge and practical life; systematic construction; and mathematical figures.[35]

Mother and Nursery Songs. The *Mother and Nursery Songs* were a compilation of fifty-five songs; with corresponding mottoes, pictures, and commentaries for the mother or teacher in guiding the child's experience. The songs were grouped by topics. The sequence began with the body and continued to nature, human life, and heavenly things. Froebel tried to impress upon the child the high dignity of work and the religious worth of what man put into work.[36] His suggestions for the use of the pictures varied with the age of the child.

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[33] Barnard, *op. cit.*, pp. 342-46.

[34] *Ibid.*, p. 221.

[35] *Ibid.*, pp. 220-21.

Proponents of Froebel referred to music as a separate part of the curriculum, using the piano, glass harmonicas, and all sorts of objects that made melodious sounds.[37]

Games. The game or movement plays were divided into traveling plays, representation plays, running plays, walking games, and plays to train the body and limbs.[38] Most of the titles define the activity. In representation plays, the children imitated an animal or movements in nature. The games combined movement with an idea. Music and verses accompanied most games. Balls were used for some of them.

The American kindergartens also used calisthenics and drills.

Nature study. The materials for nature study were chiefly plants and animals in the natural surroundings and at school.

The animals that were often cared for at school were chickens, doves, rabbits, dogs, goats, birds, and fish.[39] The children learned the habits and characteristics of the animals.

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[36] Bowen, op. cit., p. 76.

[37] Barnard, op. cit., p. 256.

[38] Josephine Jarvis (ed.), Friedrich Froebel's Pedagogics of the Kindergarten (New York: D. Appleton and Company, 1895), pp. 239-70.

[39] Barnard, op. cit., p. 219.

Gardens were important in Froebel's kindergartens. The garden was a rectangular plot--one part for the group and the other for individual children. The size of the individual child's plot was a square metre. The plants and individual children's plots were labeled. Spades, rakes, and watering pots were furnished.[40] Gravel paths and shell borders were added in some gardens.

The flowers, vegetables and field plants were to relate to human needs. Some of the plants were corn, legumes, herbs, and other useful plants. The useful plants were used for botany, observations, and experimentation.[41]

Religious training. The materials for religion were songs, a religious narrative, and prayers. Nature study, the pictures in the Mother and Nursery Songs, and the gifts and occupations provided opportunity to teach religious and moral values.

V. METHODS OF THE FROEBEL KINDERGARTEN

Self-activity through play was Froebel's major method in the kindergarten.

Froebel observed that children were moving constantly in their play. Their minds, senses, hands and whole being were working together. He felt that doing and feeling were connected, that interest was the cause of activity, and that activity caused other feelings.[42] The kindergarten was to systematize the child's activity, and harmonize it with the particular stage of development with proper materials and with other children.

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[40] Fletcher, op. cit., pp. 237-40.

[41] Barnard, op. cit., p. 220.

In his Pedagogics of the Kindergarten, Froebel stated that the kindergarten will encourage the child's impulse to activity, investigation, and creative work. It will be an institution where children instruct and educate themselves and where they develop and integrate all their abilities through play, which is creative self-activity and spontaneous self-instruction.[43]

Froebel applied his law of opposites by beginning with the greatest contrasts in teaching. He suggested the use of observation, investigation, the senses, and the limbs, especially the hand. He felt that children learn first by imitation, then by using the imagination, and last, being inventive.[44]

Gifts and occupations. The first gifts were used both at home and at school. The first four gifts were to be used by the child during his first four years. At school, the child was to have an aim for his action, was to view the object in its many-sided references and connections, and use all of the material. A change in the construction was made by moving only the needed parts.[45]

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[42] Bowen, op. cit., p. 128.

[43] Lilley, op. cit., p. 92.

[44] Barnard, op. cit., p. 613.

[45] Jarvis, op. cit., p. 177.

Each child had the gift. The child first saw the gift as a whole in front of him. It was placed on a squared board or paper, or in America, on a table on which were drawn one-inch squares. The child was permitted to play with the gift as he wished, part of the time, but he was always to be neat and orderly. A name was given to his various objects in the form of words, songs, or verses. The teacher told original stories uniting all the formations of all the children.[46] The children were encouraged to make forms of life, patterns, and forms of knowledge.[47] As each gift was mastered, it was used with the other gifts. The use of these gifts ranged from extreme rigidity to greater flexibility.

The occupations were used in many different ways. They were to teach children concepts of size, form, number, and design. The teachers progressed from the concrete to the more abstract.

The children at each table were engaged in a different occupation, while others were engaged in games. Generally, the children had to work with an occupation according to definite rules. They would reproduce an outline of a figure or a design. Lines were used a great deal in this sequence--vertical, horizontal, slant, and curved lines. Modifications were permitted after the child was skilled in the occupation. There is scanty evidence of originality in using the occupations. For example, drawing was done in the air, in sand on a tray, on a slate, and then on paper in a network. The children would copy the outlines they made with other materials. They would be taught to make first front, and then perspective views. Accuracy in drawing lines in the squares was emphasized.[48] Free drawing and painting seem to have been common later. The teacher often added a game, story, or song to the representation the child had made.

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[46] Ibid.

[47] White, op. cit., p. 93.

Mother and Nursery Songs. The songs, pictures, mottoes and suggestions for their use were to help the child learn to sing and to understand the life about him through conversation and playing out the songs or verses. Hand motions were illustrated. Moral training and symbolism were taught through conversation. Froebel suggested that mothers take their children to see the places referred to in the songs and pictures.[49] He had many suggestions for helping children classify the objects in the pictures. He intended the songs to be used as examples of what might be done.[50]

In America, the book of songs was used verbatim by some teachers and very little by others.

Games. The games were played during the second part of the day's session. Froebel usually began the games with a ball, combining the action of the nearest child with it. The games were continuous, changing according to the circumstances or the children's suggestions.

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[48] Barnard, op. cit., p. 612.

[49] White, op. cit., p. 129.

[50] Bowen, op. cit., p. 76.

The songs and rhymes were changed accordingly. They were also used to accompany change to another game.[51] The rhythmic movements of the children were very important to Froebel.

Language and nature study were used as children described what they saw on a real or make-believe walk in some games. The circle, Froebel's symbol of unity, was used in many games. Froebel's games were characterized by patterned action, rhythm, and group activity.

Nature study. The main methods used in nature study were walks, observation, and caring for the plants and animals.

The children took a walk at least once a week. They were taught to observe the plants and animals in their natural surroundings, and to notice details. Froebel stated that the teacher should tell the child only what he could not find out for himself.[52] Examples of nature were gathered on these walks and displayed in cabinets. These were studied and copied in the occupations. The teacher told original stories about the walks, the display, and the objects made by the children.

Children learned responsibility in sharing the care of the community garden plot and of the animals. The children chose what they wanted to plant and what they wished to do with the plants. The seeds and bulbs were stored for the following season.[53]

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[51] White, op. cit., p. 114.

[52] Lilley, op. cit., p. 90.

[53] Fletcher, loc. cit.

Most of the gardens in America were indoor boxes. Nature study was used as the central subject of the curriculum by some of the teachers.

The values of the activities in nature study were believed to be: a gratitude by the child for those who care for him, the understanding of possession, the awakening of life, and the developing of self-mastery and self-denial.[54]

Religious training. The kindergarten session opened and closed with a circle of all the children during which religious worship was held.

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[54] Barnard, op. cit., pp. 174-75.

CHAPTER III

THE MONTESSORI MOVEMENT

I. HISTORY OF THE MONTESSORI MOVEMENT

The educational achievement in writing and reading of the young children in the Montessori schools brought public recognition to Maria Montessori (1870-1952).

Montessori was an Italian doctor of medicine who pioneered in the field of psychiatry. She began work with mentally deficient children while she worked at the Psychiatric Clinic of the University of Rome. She was so successful in educating the defective children that they passed the public examination for normal children. This achievement brought her immediate public recognition. Montessori reasoned that if the achievement of the mentally defective was higher than that of normal children, then education for the latter needed improvement. For seven years she studied Itard's and Seguin's education for defective children, nervous diseases of children, anthropology, experimental psychology, and philosophy, for the purpose of developing an educational system for normal children.

Montessori became famous through her work in schools called Children's Houses that were located in the model apartments built for industrial workers in Rome.[1] Slum children from two and one-half to seven years of age learned numbers at the age of three, to write at the age of four, and to read at five, without compulsion. Montessori did not originally intend to teach reading, writing, and arithmetic to small children, but she modified this view because so many children tried to teach themselves.[2] Parents were given rules to follow to reinforce the learning, and were required to see the directress once a week.[3] During this period Montessori developed her method, the prepared environment, and didactic apparatus by observing children and by experimenting in her schools. She revolutionized the notion of early education.[4]

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[1] Luella Cole, A History of Education: Socrates to Montessori (New York: Holt, Rinehart, and Winston, 1950), p. 563.

Montessori's method was equally successful with all classes of children[5] and in many countries.[6] Many educators came to Rome, including professors of major American universities, to visit her schools, and these visitors prevailed upon her to give international training courses in her method.

In America, her work was first publicized by McClure's Magazine (1911). She made a lecture tour to the United States in

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[2] Ibid., p. 570.

[3] Maria Montessori, The Montessori Method (New York: Schocken Books, 1964), p. 61.

[4] Maria Montessori, Dr. Montessori's Own Handbook (New York: Schocken Books, 1965), p. 9.

[5] Ellen Y. Stevens, A Guide to the Montessori Method (New York: Frederick A. Stokes Company, 1913), p. 12.

[6] E. M. Standing, Maria Montessori--Her Life and Work (Fresno, California: Academy Library Guild, 1959), p. 45.

1915 and also gave training courses. Translations of Montessori's major books were sold in the United States. Dorothy Canfield Fisher wrote two books about her method.[7] Some Montessori schools and societies were established. Hunt indicates the rapid rise and decline of interest in the Montessori system in America by the number of articles written about her as follows:[8]

Year	Number of Articles
1909-10	2
1911	6
19[illegible]	54
1913	76
1914	55
1915	15
1917	8
1918	4

Hunt attributes the rapid decline of Montessori's popularity to the fact that she failed to get support from those psychologists of the functional school or the emerging behavioristic school.[9]

Since 1958 there has been a vigorous rebirth of Montessori in the United States, marked by the establishment of new associations and private schools for preschool children, particularly in suburban areas in different sections of the nation.[10] Nancy Rambusch has been a leader in this movement. She established the Montessori school, Whitby School,[11] and the American Montessori Society.[12] This period also has seen publication of new Montessori books, including one by N. Rambusch.[13] Most of the American Montessori schools are private schools. Montessori is used in some headstart programs[14] and other educational programs for disadvantaged children.[15] Some colleges are offering courses with a Montessori concentrate.[16] Deutsch is leading the way beyond some of the traditional Montessori methods in his experimental projects in New York.[17] Research is in progress to assess the Montessori system.[18] The American Montessori Society is more flexible in its use of modern techniques and materials than its European counterpart.[19]

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[7] Dorothy C. Fisher, The Montessori Manual (Chicago: The W. E. Richardson Company, 1913); and A Montessori Mother (New York: Henry Holt and Company, 1912).

[8] Maria Montessori, The Montessori Method (New York: Schocken Books, 1964), p. xii.

[9] *Ibid.*, p. xiv.

[10] Calvert R. Orem (ed.), Montessori for the Disadvantaged (New York: G. P. Putnam's Sons, 1967), p. 8.

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[11] Sister M. Alban, "The Montessori Method--Applied!" Catholic School Journal, 61:23, December, 1961; and E. M. Standing, The Montessori Revolution in Education (New York: Schocken Books, 1962), p. 191.

[12] Maria Montessori, Spontaneous Activity in Education (New York: Schocken Books, 1965), p. xxvi.

[13] Orem, loc. cit.

[14] Ibid., pp. 91, 107.

[15] Ibid., pp. 48, 118; and "Mount Vernon, New York, Mixes Mothers and Montessori," Nation's Schools, 77:60-61, June, 1966.

[16] Orem, op. cit., p. 91.

[17] Ibid., p. 48.

[18] Ibid., pp. 91-92.

[19] Bernard Spodek, "Montessori Education Visited," Elementary English, 42:78, January, 1965.

Montessori was constantly devising new methods, adapting old ones, studying each child, analyzing the subject matter, and investigating the techniques used by other workers in the field.[20] She acquainted educational leaders of other countries with her methods. She published, lectured, trained, and supervised the establishment of Montessori schools and societies.[21] Her plan of education extended from infancy through maturity.[22] However, her main contribution was the system of education for young children. Montessori lectured until her death. Her adopted son, Mario, directs and coordinates the work of the Association Montessori Internationale, with headquarters in Amsterdam.[23]

Montessori anticipated many trends in current early learning research. She conceived of an early education in many respects unlike the present American kindergartens. Montessori believed that social adjustment was integrally related to a strong sense of accomplishment. She viewed the years between three and six as those years in which the habits and the bases of learning were established.[24]

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[20] Cole, op. cit., p. 564.

[21] Ibid., p. 565.

[22] Nancy M. Rambusch, Learning How to Learn (Baltimore: Helicon, 1962), p. 117.

[23] E. M. Standing, Maria Montessori--Her Life and Work (Fresno, California: Academy Library Guild, 1959), p. 52.

[24] Rambusch, op. cit., p. vii.

The chronological lists in Appendix B indicate the significant developments of the Montessori educational system in Europe and America.

II. AIM OF THE MONTESSORI METHOD

The aim of Montessori education is to "develop or set free the child's personality."[25] The environment of a Montessori school is organized to reflect the actual potentialities and needs of the child so that he can develop his personality. A characteristic of this sytem is the spontaneous progress[26] of the development of the young child. The child has the freedom to select from this environment the things that satisfy his inner needs. Rambusch calls this the work of self organization, by which the child adapts himself to the conditions of life.[27]

Montessori reiterated the rights of the child to develop his personality in her writings--the rights to independence, to activity, to explore the world for himself, and to claim suitable working conditions.[28]

A normalized child in a Montessori environment will develop self-mastery and a sense of responsibility. He will have the time, the materials, and the precise method to achieve control over himself and his environment--which is self-mastery. Competence breeds confidence. The child learns to be responsible first to himself and then to the situation in which he finds himself.[29]

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[25] Maria Montessori, The Montessori Method (New York: Schocken Books, 1964), p. 33.

[26] *Ibid*., p. 228.

[27] Rambusch, *op. cit.*, p. 15.

[28] Standing, *op. cit.*, p. 235.

Social development is achieved through genuine social life in the classroom. The child learns to fun tion as an individual and as a member of a group, and to assume his share of the responsibility. He learns to help, to discuss, to borrow, to share, and to wait.[30] Rambusch believes that social adjustment is integrally related to a strong sense of accomplishment--an achievement of Montessori education.[31] Emotional development is closely related to social maturity. Controls must be learned to live in the free Montessori school society.[32]

The whole personality of the child is developed--his intellectual faculties, his powers of deliberation, initiative and independent choice, with their emotional complements. By living as a free member of a real social community, the child is trained in those fundamental social qualities which form the basis of good citizenship.[33]

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[29] Rambusch, op. cit., pp. 44-55.

[30] E. M. Standing, The Montessori Revolution in Education (New York: Schocken Books, 1962), p. 98.

[31] Rambusch, op. cit., p. vii.

[32] Ibid., p. 44.

[33] Standing, op. cit., p. 205.

III. CURRICULUM OF THE MONTESSORI METHOD

The Montessori approach to learning consists in the application of a certain set of principles regarding the child, his will, and his need to learn. These principles must take into account the culture and the expectations of that culture for the child as an adult.[34] The prepared environment, the periods of sensitivity, and the child's role in constructing himself are basic to the program Montessori developed.[35]

The environment and apparatus have been organized to promote the child's self-development. There is an environmental emphasis on reality. The program provides the kinds of training to make the child an independent learner.[36] The control of error found in the materials and in the environment assist the child in becoming independent.[37]

The law of sensitive periods recognizes the fact that certain conditions in the environment determine different results, depending upon when the conditions are applied to the stage of the individual's development. Conditions which are extremely favorable to development during a certain period may become ineffectual, or even unfavorable, during a later period. The didactic materials have been created to correspond to these sensitive periods and to supply their needs.[38]

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[34] Nancy M. Rambusch, Learning How To Learn (Baltimore: Helicon, 1962), p. 6.

[35] *Ibid.*, p. 16.

[36] Standing, *op. cit.*, pp. 18-19, 86.

[37] *Ibid.*, pp. 79-92.

Montessori believed that the child, in constructing himself, following his own rhythm, absorbed learning from the environment, and brought a need to move in his learning. The child was given liberty within limits in the prepared environment, to fulfill his psychological needs.[39]

The basic curriculum for the children of the ages three to six is divided into three major areas: motor education, education of the senses, and preparation for writing and arithmetic. The following summary outlines the curriculum and its purposes.[40]

CURRICULUM

Content	Purpose
Motor education	Care and management of the environment
Practical life exercies Primary movements of everyday life Care of the person Management of the household Silence game	Cleanliness, order, poise, grace and courtesy, refinement of movements, responsibility

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[38] Ibid., pp. 36-38.

[39] Rambusch, op. cit., pp. 16-27.

[40] Maria Montessori, Dr. Montessori's Own Handbook (New York: Schocken Books, 1965), pp. 60, 64-131; Maria Montessori, The Montessori Method (New York: Schocken Books, 1964), pp. 121-23, 137-38; E. M. Standing, Maria Montessori--Her Life and Work (Fresno, California: Academy Library Guild, 1959), pp. 193-207; and E. M. Standing, The Montessori Revolution in Education (New York: Schocken Books, 1962), pp. 99-107.

Content	Purpose
Culture of plants and animals	Responsibility, patience, moral education
Manual work Clay work: vases, tiles, bricks, walls Painting	Completion of work, enrich the world
Gymnastic exercises Outdoor apparatus Free gymnastics	Coordination, balance
Rhythmic movements	Balance, rhythm
Education of the senses	Observation
Cylinders, cubes, prisms, rods	Dimensions, visual and tactile senses
Geometric insets and cards	Form, visual and tactile senses
Color tablets	Color, visual sense
Touch board, fabrics	Texture, tactile sense
Wooden tablets	Baric and tactile senses
Water bottles	Thermic and tactile senses
Geometric solids	Stereognostic sense
Sound cylinders, bells	Auditive sense
Preparation for writing and arithmetic	Preparation for formal education
Dressing frames	Educational movements of the hand
Metal geometric insets	Preparation for writing
Sandpaper letters of the alphabet	Preparation for reading and writing, tactile, visual, and auditive senses
Cardboard letters of the alphabet	Spontaneous writing, composition of words, reading, foundation for spelling
Sandpaper numbers	Preparation for arithmetic, tactile and visual senses
Smooth numbers and rods	Preparation for arithmetic

Content	Purpose
Boxes and spindles, 0-9	Preparation for arithmetic, counting
Leaf insets	Study of botany
Maps of the continents	Study of geography
Musical staffs and notes	Reading and composition of music

Montessori's proponents indicate her concern for moral training. She did not develop her ideas on the subject sufficiently to include it in her curriculum.

The children attend school all day. The morning is devoted to an uninterrupted period of individual activity. Children frequently engage in a few sporadic tasks before they begin the great work which most corresponds to their particular needs at that moment.[41]

The schedule of the Children's House in 1912 was arranged as follows:[42]

9-10 am	Greeting, inspection, exercises of practical life, put the room in order, conversation, religious exercises
10-11 am	Intellectual and sense exercises, nomenclature
11-11:30 am	Simple gymnastics
11:30-12 am	Luncheon
12-1 pm	Free games
1-2 pm	Directed games; older children put room in order, inspection, conversation
2-3 pm	Manual work
3-4 pm	Collective gymnastics and songs Caring for plants and animals

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[41] Rambusch, op. cit., pp. 92-93.

[42] Florence E. Ward, The Montessori Method and the American School (New York: The Macmillan Company, 1913), pp. 24, 26.

The overall result of the Montessori curriculum is a child who is calm, strong, master of himself, serene, satisfied, and feels an inner well-being.[43]

IV. MATERIALS FOR THE MONTESSORI METHOD

The prepared environment and the didactic apparatus are important elements in the Montessori method.

The environment, or classroom, is designed to the child's scale.[44] It is designed to help the child achieve a sense of himself, self-mastery and mastery of his environment, through the successful execution and repetition of apparently simple tasks which are linked to the cultural expectations the child faces in the context of his total development.[45] Ample floor space provides the needed working space for children. The furniture provides for control of error with its light color and light weight. Each child has a drawer, an apron, and a mat for working. Artistic pictures, plants, vases and dishes are selected for beauty. A playground with an open space for a garden should be in direct communication with the schoolroom.[46] The children have the responsibility of keeping the room clean and orderly.[47]

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[43] Maria Montessori, "The Organization of Intellectual Work in School," Journal of Proceedings and Addresses of the 53rd Annual Meeting and International Congress on Education (Washington, D.C.: National Education Association, 1915), p. 721.

[44] Maria Montessori, Dr. Montessori's Own Handbook (New York: Schocken Books, 1965), p. 22.

[45] Nancy M. Rambusch, Learning How to Learn (Baltimore: Helicon, 1962), p. 71.

Montessori adapted the Seguin materials and Froebel's bricks, cubes and geometric tablets.[48] She prepared new didactic apparatus by observing the children. The things children used constantly were retained and the things they ignored were eliminated.[49] Much of the original apparatus is used in the Montessori schools today. However, the apparatus differs from culture to culture,[50] and schools affiliated with the American Montessori Society include many modern materials.

The didactic apparatus is intended to stimulate the child's natural desire to act and learn through action and to provide him with action which shall give him a better control of his own body and willpower and which shall lead him naturally from a simple action to a more difficult one.[51]

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[46] Montessori, op. cit., pp. 38-41; Maria Montessori, The Montessori Method (New York: Schocken Books, 1964), pp. 80-83; and Maria Montessori, Spontaneous Activity in Education (New York: Schocken Books, 1965), pp. 142-48.

[47] Dorothy C. Fisher, A Montessori Mother (New York: Henry Holt and Company, 1912), p. 69.

[48] Mattie C. Hardy, "The Derivation of the Montessori Didactic Apparatus," Elementary School Journal, 18:296-99, December, 1917.

[49] Mario Montessori and Claude A. Claremont, "Montessori and the Deeper Freedom," Education and Philosophy, G. Z. Bereday and J. A. Lauwerys, editors (The Yearbook of Education. New York: World Book Company, 1957), p. 415.

[50] Rambusch, op. cit., p. 30.

[51] Dorothy C. Fisher, The Montessori Manual (Chicago: The W. E. Richardson Company, 1913), p. 23.

Each piece is designed to achieve a particular end.[52] The emphasis is on perception. The structured apparatus provides for percepts acquired through sensory motor means and through mobility.[53] Each difficulty is isolated to train the attention so that the child will get sharp impressions for later recall and association.[54] A series of apparatus represents a sequence of related difficulties, leading toward a definite school subject,[55] and corresponding to the psychical needs of formation[56] for a particular sensitive period.

One set of the apparatus is supplied for a classroom of forty children. Montessori included apparatus for parallel exercises for those children who need additional work. The material is self-corrective so that reinforcement is immediate and each is dependent on the activity of the learner for its use.[57] All apparatus leads to a part of social life. This set of concrete models of abstract ideas leads to earlier learning.[58]

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[52] E. M. Standing, Maria Montessori--Her Life and Work (Fresno, California: Academy Library Guild, 1959), p. 266.

[53] Rambusch, op. cit., pp. 42-43.

[54] Ellen Y. Stevens, A Guide to the Montessori Method (New York: Frederick A. Stokes Company, 1913), p. 106.

[55] E. M. Standing, The Montessori Revolution in Education (New York: Schocken Books, 1962), pp. 69-70.

[56] Maria Montessori, Spontaneous Activity in Education (New York: Schocken Books, 1965), p. 85.

[57] Rambusch, op. cit., p. 122.

[58] Montessori and Claremont, op. cit., p. 418.

The list of materials represents the basic apparatus in a Montessori room for children of two and one-half or three years to six years of age.[59]

Motor Education

Materials for practical life exercises

- Wooden dressing frames--zipper, large buttons, snaps, hooks and eyes, simple slide buckles, buckles with eyes, bows for tying, and shoe-lacing
- Washing and ironing equipment for clothes
- Shoe polishing kit
- Cleaning equipment for the room--several types of brooms, dust cloths, dust pan
- Cleaning materials for washing equipment in the room--pail, pitchers, basin, brush, sponges
- Dishes and silverware for lunch

Garden plot and garden tools

Manual materials--clay, water colors

Gymnastic equipment--line on floor, fence of parallel bars supported by upright poles, wide-seated swing, rubber ball hung on a cord, round wooden stairway, low wooden platform with lines for jumping, rope ladders

Sensorial Material

Visual sense--dimensions

- Four sets of wooden cylinders with knobs which vary in height, diameter, and combinations of height and diameter
- Three sets of apparatus graduated in size--cubes and prisms

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[59] C. Baroni and G. Marangon, Materials for Montessori Schools (Gonzaga [Mantova], Italy: August, 1965), pp. 4-19; Maria Montessori, Dr. Montessori's Own Handbook (New York: Schocken Books, 1965), pp. 26-131, 140-82; Maria Montessori, The Montessori Method (New York: Schocken Books, 1964), pp. 137-48, 185-214, 298; E. M. Standing, The Montessori Revolution in Education (New York: Schocken Books, 1962), pp. 103-180; and F. E. Ward, The Montessori Method and the American School (New York: The Macmillan Company, 1913), pp. 69-161.

Visual sense--form

Cabinet of 33 geometric wooden insets and frames
Geometric form cards--sets of solid color, broad outline, narrow outline, which duplicate forms in cabinet
Four sets wooden triangles, difficulty increases with each set, variety of types of triangles
Rectangles, triangles, polygons, irregular geometric figures--systematic variations in size, angles and sides

Visual sense--color

Four sets wooden tablets, primary and secondary colors, series of colors in gradation

Tactile sense--texture

Touch boards and sandpaper tablets in gradation
Fabric squares, gradation in color and texture

Tactile and baric senses

Tablets in three types of wood having three gradations of weight

Thermic sense

Chromed metal water bottles

Stereognostic (muscular and visual memory) sense

Wooden geometric solids
Various objects for comparing

Auditive sense

Two series of brass bells on wooden base for sound discrimination and study of musical notes

Toys

Furnishings of a doll's house, balls, dolls, trees, flock of sheep, various animals, tin soldiers, railways, and an infinite variety of simple figures

Materials for Education

Preparation for writing

- Sandpaper, plastic and cardboard letters
- Colored wooden pencils and paper

Introduction to arithmetic

- Wooden prisms, each piece painted in alternate blue and red colors
- Spindle boxes and wooden dowels, compartments for 0 to 9
- Plastic counting discs and cardboard cards with numerals 1 to 10
- Sandpaper numerals mounted on plastic, 0 to 9
- Golden beads--singles, tens, hundreds, thousands
- Slotted boards into which wooden number tablets fit, building 10 to 99

Material for the study of botany

- Wooden insets and frames to study forms of leaves, a flower and a tree

Materials for geography

- Wooden maps of each continent, and the planisphere
- Identical outline cardboard maps to study countries, capitals, and flags

Materials for music

- Series of wooden insets for study of musical notes

Liturgical material

- Wooden liturgical calendar of the Christian liturgical seasons

V. METHODS OF THE MONTESSORI MOVEMENT

Activity is the keynote of all that is going on in a Montessori school.[60] Montessori believed that the young child has to learn with his whole body, with emphasis on sensorial training, if he is to learn at all.[61] The activity, or work, must be meaningful to the child so that he is directly implicated in his construction of himself.[62]

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[60] E. M. Standing, Maria Montessori--Her Life and Work (Fresno, California: Academy Library Guild, 1959), p. 281.

The child selects the apparatus he prefers from among the items which have been introduced to him by the directress. Preference is dictated by the internal needs of "psychical growth." Each child occupies himself with each object for as long as he wishes.[63] Through repetition and teaching himself without interruption, the child learns through his own activity. Children may work in groups.

The apparatus is so designed that the child begins with a few sharply contrasted stimuli and proceeds to many stimuli with slighter shades of difference.[64] Each stimulus is first separated. After the child has mastered the individual stimuli, called remote preparation,[65] they are then combined. Writing combines the visual, auditive, and tactile sensorial education.[66] Explosion into writing which caught the public eye, is achieved through the following sequence:[67] touching contours of the plane geometric sets, touching the forms of the alphabet with the fingers, tracing around the contours of the metal geometric sets with a colored pencil, filling in the geometric figures with parallel lines, composing words with the letters, and spontaneously copying the words. The sequence from the concrete to the abstract idea is also incorporated into the apparatus.[68]

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[61] Nancy M. Rambusch, Learning How to Learn (Baltimore: Helicon, 1962), p. 43.

[62] Ibid., p. 29.

[63] Maria Montessori, Spontaneous Activity in Education (New York: Schocken Books, 1965), p. 86.

[64] Ward, op. cit., pp. 67-69.

[65] Maria Montessori, Dr. Montessori's Own Handbook (New York: Schocken Books, 1965), p. 151.

[66] Stevens, op. cit., p. 116.

All movement required to use the apparatus successfully is directed to some intelligent end.[69] Movement for a particular activity is analyzed, separated, and used in its proper sequence. The aim of all movement is to coordinate it to become a delicate servant of the will.[70]

Each child, responding to the inner laws of his own organism, has a different developmental timetable.[71] The child functions at different levels of development in the three areas of intellectual, social, and emotional maturity.[72] The interage grouping and freedom to choose permit the child to pace himself and to repeat, in accordance with his internal needs. He experiences repeated successes. Montessori believed that a child should never be permitted to fail, until he has a reasonable chance of success.[73]

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[67] Maria Montessori, The Montessori Method (New York: Schocken Books, 1964), pp. 261, 291.

[68] E. M. Standing, The Montessori Revolution in Education (New York: Schocken Books, 1962), p. 52.

[69] Ibid., p. 58.

[70] Montessori and Claremont, op. cit., p. 419.

[71] Maria Montessori, Dr. Montessori's Own Handbook (New York: Schocken Books, 1965), p. 15.

[72] Rambusch, op. cit., p. 5.

The directress, observing that a child is ready for the next piece of apparatus in the sequence, or upon request, presents the apparatus in a three-step lesson.[74]

Step 1. The association of sensory perception with name--"This is a rod."

Step 2. The recognition of objects by name--"Give me the rod."

Step 3. The remembering of the name which corresponds to the object--"What is this?"

This lesson is used whenever the child is learning the exact name of an object, quality, or experience. The lesson is characterized by conciseness, simplicity, and objectivity.[75] The child is treated with utmost respect. If the child makes errors in working with the apparatus, it is put aside until another time. It is assumed that the child who fails to grasp the point of the lesson is not ready for it.[76] The child first has an opportunity to master the apparatus. Gradually precise vocabulary is added. Mastery of an idea will be evident as the child uses it in his environment.[77] Collective lessons are given when it would be more helpful.[78]

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[73] Ibid., p. 128.

[74] Maria Montessori, The Montessori Method (New York: Schocken Books, 1964), p. 178.

[75] Ibid., p. 108.

[76] Ward, op. cit., pp. 67-69.

Disciplined freedom is a necessary characteristic in a Montessori room. The child is free to do what is right. The freedom of the individual must not be allowed to interfere with the general good. The child has limited freedom until he has the capacity to work alone and a knowledge of how to use the materials. Freedom and self-discipline go hand in hand.[79] Children, who are disorderly when beginning in a Montessori school, are normalized through work.[80]

Children in a Montessori school, in a favorable environment, will fix their attention upon an object, will use it for the purpose for which it was constructed, and will continue to repeat the same exercise indefinitely.[81] The results of such concentration and repetition are that order is created in the mind, facility and accuracy of reasoning power is increased, comprehension is quicker, and the powers of the will are established--all with a minimum of effort.[82]

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[77] Cole, op. cit., p. 576.

[78] Standing, op. cit., p. 165.

[79] Ibid., pp. 91-93.

[80] Ibid., p. 88; and Montessori, op. cit., p. 350.

[81] Maria Montessori, Spontaneous Activity in Education (New York: Schocken Books, 1965), p. 153.

[82] Ibid., pp. 164-65, 174.

In order to make the Montessori method function effectively, emphasis is placed on using the apparatus for the purpose for which it was intended,[83] using the apparatus correctly,[84] returning the apparatus to its specific place, helping each other, respecting another child's apparatus and space he has chosen, and using left to right movements with all equipment.[85]

The most important outcome of the Montessori auto-educative process for the child is his development of self-mastery.[86]

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[83] Fisher, op. cit., p. 45.

[84] Standing, op. cit., p. 34.

[85] Fisher, op. cit., p. 48.

[86] Calvert R. Orem (ed.), Montessori for the Disadvantaged (New York: G. P. Putnam's Sons, 1967), p. 14.

CHAPTER IV

THE CHILD STUDY MOVEMENT

I. HISTORY OF THE CHILD STUDY MOVEMENT AND THE RECONSTRUCTED KINDERGARTEN

The advent of the psychologist marked a turning point in the history of the kindergarten movement.[1] The discovery, that methods of improving instruction and learning can result from experiment, was revolutionary.[2] From 1890 to 1900 a great wave of child study swept over the country, emphasizing the differences between adults and children, and magnifying the stages of development through which a child was supposed to pass.[3]

G. Stanley Hall, president of Clark University, pioneered in the scientific study of childhood. His first attempt at systematic child study was made in Boston with the cooperation of kindergarten teachers in 1879.[4] Through a questionnaire technique, he attempted to find the contents of children's minds upon entering school. Hall found that children did not have the knowledge to understand the primers.[5] Hall and his students collected a vast amount of data on a variety of topics--on physical measurements and motor abilities, among others. He published syllabi of questions on many topics to guide observations of teachers.[6]

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[1] Nina C. Vandewalker, The Kindergarten in American Education (New York: The Macmillan Company, 1908), p. 244.

[2] John E. Anderson, "A Half Century Learning About Children," NEA Journal, 42:139, March, 1953.

[3] Patty S. Hill, "Changes in Curricula and Method in Kindergarten Education," Childhood Education, 2:101, November, 1925.

[4] "A Quarter of a Century in the Kindergarten History," Kindergarten Magazine, 8:281, December, 1895.

Hall criticized the kindergarten on these points: the program was not designed for city children, the children were overworked and were required to use their fine muscles too early, sedentary activities were overstressed, and the teachers did not tend to the health of the children.[7] He suggested that reform of the kindergarten include learning out-of-doors through real experiences; that the body be strengthened through freedom and activity, rest, lunch, and use of larger materials; and that a greater variety of toys and materials be used in a broadened program.[8] Hall concluded that the development of the child follows laws of its own, laws with which teachers had best not interfere.[9]

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[5] G. Stanley Hall, "A Children's Institute," Harper's Monthly Magazine, 120:620, March, 1910.

[6] G. Stanley Hall, "Syllabi for Child Study," Kindergarten Magazine, 8:442-43, February, 1896.

[7] G. Stanley Hall, Educational Problems, Volume I (New York: D. Appleton and Company, 1911), p. 17.

[8] Ibid., p. 4; G. Stanley Hall, "The Ideal School as Based on Child Study," The Forum, 32:26, September, 1901; and "Kindergarten Day at Worcester," Kindergarten Magazine, 9:82, September, 1896.

[9] Lawrence A. Cremin, "The Progressive Movement in American Education: A Perspective," Harvard Educational Review, 27:258, Fall, 1957.

Dr. Hall's most significant contributions were in the areas of health, hygiene, sanitation, use of larger materials, and more activity.[10]

E. L. Thorndike recommended improvements in kindergarten practice which were based on psychological facts in 1903. Among the more significant changes he suggested were increase of outdoor play, arrangement of the room and program to suit the body of the child, increase of large movements and of free play, teaching through concrete things from the child's environment, more stress on interests in the actual things of life, and establishment of worthy habits.[11]

The publication in 1908 and 1911 of Binet's intellectual tests provided impetus for the study of mental growth.[12]

Francis W. Parker approached educational problems from the viewpoint of the individual needs of a child in his experimental work at Quincy, Massachusetts, at the Cook County Normal School Chicago (1883), and at the Institute at the University of Chicago

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[10] Lois H. Meek (chm.), "The Kindergarten in Relation to Pre-School and Parental Education," Preschool and Parental Education, National Society for the Study of Education, The Twenty-Eighth Yearbook (Bloomington, Illinois: Public School Publishing Company, 1929), p. 250.

[11] Edward L. Thorndike, "Notes on Psychology for Kindergartners," Teachers College Record, 4:67-68, November, 1903.

[12] Chester W. Harris (ed.), Encyclopedia of Educational Research, The American Educational Research Association, National Education Association (New York: The Macmillan Company, 1960), p. 371.

(1899).[13] Parker fostered a program of activities that enlisted the children's interest in, and physical equipment for, exploration, building, and observation.[14] Alice Putnum, an influential kindergarten teacher who studied under Parker, came away with a new vision of the meaning of freedom, creative work, education for and through social living, and companionship with nature.[15] Parker made a significant contribution in the application of child study principles to education.

John Dewey established an experimental school in Chicago (1896) to demonstrate the feasibility of the principle of relating school to life.[16] He laid the groundwork of a functionalist theory of behavior. Dewey viewed learning as the active enterprise of a total organism in a genuine social situation. The intended outcome was modification of behavior and attitudes.[17] He was influenced in his thinking by James, whose psychological principles suggested motor expression and social participation.[18]

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[13] Cremin, op. cit., p. 253; and Adolph E. Meyer, The Development of Education in the Twentieth Century (New York: Prentice-Hall, Inc., 1949), pp. 31-33.

[14] Robert H. Beck, "Traditional, Progressive, and Modern Education," The Three R's Plus, Robert Beck, editor (Minneapolis: University of Minnesota Press, 1956), p. 6.

[15] International Kindergarten Union, Committee of Nineteen, Pioneers of the Kindergarten in America (New York: The Century Company, 1924), p. 208.

[16] John Dewey, The School and Society (Chicago: The University of Chicago Press, 1902), p. 94.

[17] Cremin, op. cit., pp. 258-59.

Dewey's observations and studies regarding the fundamental impulses and interests of children may be summarized as follows: conversation and communication, inquiry, construction, and artistic expression.[19] These basic interests were embodied in the project method, in which the child was involved in the planning, executing, and evaluating the work in a socialized school. It was Kilpatrick[20] who interpreted Dewey's process.

Dewey's critical writings, *School and Society*,[21] *Experience and Education*,[22] and his monograph of the kindergarten,[23] have perhaps had more influence than those of any other educator and philosopher in reforming kindergarten practice.[24] The characteristics of the four- to eight-year-olds, according to Dewey, demanded a motor outlet for expression, the subject matter being selected from the child's home and neighborhood life, which he could reproduce in imaginative and expressive forms. The child's natural instincts, encouraged with the necessary stimuli and materials, were to be utilized to carry him to a higher plane of perception.[25] Dewey outlined a kindergarten program with a free social atmosphere and a flexible schedule in which children would play with large blocks and toys, and would construct with all kinds of materials.[26]

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[18] Samuel C. Parker, *A Textbook in the History of Modern Elementary Education* (Boston: Ginn and Company, 1912), p. 483; and Bird T. Baldwin, "William James' Contributions to Education," *The Journal of Educational Psychology*, 2:375-77, August, 1911.

[19] Patty S. Hill, *Kindergarten*, Reprint from the American Educator Encyclopedia, 1942 (Washington, D.C.: Association for Childhood Education International, 1967), p. 1963.

[20] William H. Kilpatrick, *The Project Method* (New York: Teachers College, Columbia University, 1918).

[21] Dewey, *loc. cit.*

[22] John Dewey, *Experience and Education* (New York: Collier Books, 1938).

[23] John Dewey, "Kindergarten," Monograph No. 5, *The Elementary School Record*, 1:127-51, June, 1900.

[24] Walter S. Monroe (ed.), *Encyclopedia of Educational Research*, The American Educational Research Association, National Education Association (New York: The Macmillan Company, 1950), p. 647.

Arnold Gesell, Director of the Yale Psycho Clinic, was influential in establishing normative standards of the development of the child to six years of age.[27] He concluded that every child has an individual pattern of growth, unique to him, and he travels by his own tailor-made schedule.[28] Gesell was concerned about the proper conditions of health for young children. He co-authored a government publication[29] in which he outlined a kindergarten program of preventive work in health. Gesell recommended a readjustment of the kindergarten to meet the elementary necessities of a continuous program of health supervision and developmental hygiene for the much-neglected preschool child.[30]

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[25] John Dewey, The School and Society (Chicago: The University of Chicago Press, 1902), pp. 105-127.

[26] John Dewey, "Kindergarten," Monograph No. 5, The Elementary School Record, 1:129-41, June, 1900.

[27] Arnold Gesell, The Mental Growth of the Pre-School Child (New York: The Macmillan Company, 1925).

[28] Meyer, op. cit., p. 448.

[29] Arnold Gesell and Julia W. Abbot, The Kindergarten and Health, Bureau of Education, Health Education No. 14 (Washington: Department of the Interior, 1923).

The results of child study led to numerous experiments in an effort to apply the findings and to improve education. Dewey described many such experiments in Schools of Tomorrow.[31] The experiments had in common respect for individuality, increased freedom, activity, attention to social relations, respect for self-initiated learning, and were built upon the nature of the child and his experiences.[32] Significant experiments were conducted by Caroline Pratt in New York City and Patty Hill. Caroline Pratt started with the interests and abilities of the child to begin a step by step development in a social and carefully prepared environment.[33] Patty Hill and Anna Bryan were the first kindergarten teachers to work with Hall (1895) in an attempt to solve problems in kindergarten education.[34] At Teachers College, Columbia University, Patty Hill was influential in applying child study principles to the kindergarten. In her experiments, which included reasoning, the play motive, motor and manual expression, and construction,[35] the basic principle was that there must be freedom somewhere--in terms of choices, judgments, or decisions.[36]

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[30] Arnold Gesell, The Pre-School Child (Boston: Houghton Mifflin Company, 1923), p. 59.

[31] John and Evelyn Dewey, Schools of To-Morrow (New York: E. P. Dutton and Company, 1915).

[32] John Dewey, "Progressive Education and the Science of Education," Progressive Education, 5:197-98, July-August-September, 1928.

[33] Caroline Pratt (ed.), Experimental Practice in the City and Country School (New York: E. P. Dutton and Company, 1924), V.

[34] Hill, op. cit., p. 1962.

The kindergarten teachers were sharply divided in philosophy during the transition period. The conservatives, who adhered religiously to Froebel, were led by Susan Blow. The liberals, who favored a reconstruction of the kindergarten program based upon child study research, were led by Patty Hill. Both sides were represented on the Committee of Nineteen of the International Kindergarten Union. This committee, by about 1910, agreed upon the validity of the reconstructive efforts.[37] Patty Hill summarized the differences between the liberals and conservatives as follows:

> 1. The relation of instincts and impulses to the higher capacities and powers
> 2. Relation of desire to effort, or interest to will
> 3. Relation of sense-perception to imagination and expression
> 4. Relation of imitation to originality and invention
> 5. Relation of sense-perception and experience to the formation of the concept
> 6. Dawn and evolution of the analytical powers

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[35] Patty S. Hill (ed.), "Experimental Studies in Kindergarten Theory and Practice," Teachers College Record, 15:10-37, January, 1914.

[36] Ibid., p. 5.

[37] Patty S. Hill, Kindergarten, Reprint from the American Educator Encyclopedia, 1942 (Washington, D.C.: Association for Childhood Education International, 1967), p. 1962.

7. Dawn and evolution of the ability for abstract thinking
8. Psychological resemblances and differences between work and play
9. Dawn and evolution of the esthetic sense
10. Relation of activity to knowledge or expression in relation to the rise and formation of the image and idea[38]

Increasing criticism of kindergarten practices emphasized the subjection of the five-year-old to a discipline and a curriculum that were totally unfitted to his years.[39] Major criticisms were: the lack of healthful conditions, the small materials, the wholly teacher directed activities, overstimulation, and overemphasis on work.[40]

The reconstruction efforts reinterpreted Froebel's educational principles. The main aim was to train children in cooperative and mutually helpful living. The primary root of all educative activity was in the instinctive activities of the child. Individual tendencies and activities were organized and directed to reproduce the society into which the child would go forth.[41] Some of the major changes influenced by the child study movement were: larger and a greater variety of materials; opportunities for creativity, freedom for activity and construction; and a social organization which was informal, flexible, and which provided for the physical and mental health of kindergarten children.[42] New and freer kindergarten work grew by leaps and bounds between 1912 and 1922.[43]

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[38] Manfred J. Holmes (ed.), The Kindergarten and Its Relation to Elementary Education, National Society for the Study of Education, Sixth Yearbook, Part II (Chicago: The University of Chicago Press, 1907), p. 67.

[39] Ibid., p. 13.

[40] Ibid., p. 26; Harvey L. Walter, "Opening Address--International Kindergarten Union," Kindergarten Magazine, 8:519, March, 1896; and Patty S. Hill, "The Future of the Kindergarten," Teachers College Record, 10:51, November, 1909.

[41] John Dewey, The School and Society (Chicago: The University of Chicago Press, 1902), p. 117.

The chronological list in Appendix C indicates the significant developments of the child study movement and the reconstructed kindergarten in America.

II. AIM OF THE RECONSTRUCTED KINDERGARTEN

The aim of the reconstructed kindergarten was to develop the child's physical powers, his reasoning capacity, his instincts or interests, and his social tendencies.

The discovery that the larger or more fundamental muscles developed first led to use of larger materials and freedom to use them. The realization that attention to cleanliness, to personal and hygiene habits, and to fresh air and sunshine would improve health and thereby achievement in kindergarten, resulted in more emphasis on health.

The capacity to reason was important for success in succeeding grades, and to help the child understand his immediate environment. The play instinct and the child's interests served as motivating forces in the child's selecting, planning, and executing his projects. The informal social atmosphere developed habits of cooperation, teamwork, and self-reliance.[44]

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[42] Meek, op. cit., pp. 251-53; Mary F. Schaeffer, "Conservatism Versus Radicalism in the Kindergarten," Education, 27:42, September, 1906; Holmes, op. cit., p. 130; and Monroe, op. cit., p. 650.

[43] Ilse Forest, Preschool Education (Boston: Ginn and Company, 1935), p. 11.

The ultimate goal was to develop the self-expression of the child and to bring about the full development of his individuality.[45] In a report of kindergarten practices, Mary Davis indicated a need for clarity in teachers' statements of specific and immediate aims for the kindergarten activities.[46]

III. THE CURRICULUM OF THE RECONSTRUCTED KINDERGARTEN

By 1925, the kindergartens were becoming an established part of the educational system. Children from four to six years of age attended half-day sessions.[47] In a survey of kindergartens, 36 per cent of a kindergarten session was devoted to physical education activities,

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[44] William T. Root, PreFirst-Grade Training, Bureau of Education Kindergarten Circular No. 13 (Washington: Department of the Interior, 1923), pp. 5-6; Patty S. Hill, Kindergarten, Reprint from the American Educator Encyclopedia, 1942 (Washington, D.C.: Association for Childhood Education International, 1967), pp. 1965-68; Mary D. Davis, A Primer of Information about Kindergarten Education, Bureau of Education City School Leaflet No. 30 (Washington: Department of the Interior, August, 1928), p. 8; John E. Anderson, "Changing Emphases in Early Childhood Education," School and Society, 49:1-9, January 7, 1939; and Julia W. Abbot, The Child and the Kindergarten, Bureau of Education Kindergarten Circular No. 8 (Washington: Department of the Interior, 1923), pp. 2-3.

[45] Davis, op. cit., p. 7.

[46] Mary D. Davis, General Practice in Kindergarten Education in the United States, Research Committee of the Department of Kindergarten Education (Washington: National Education Association, 1925), p. 129.

[47] Ibid., pp. 27-28.

33 per cent to the general arts, 16 per cent to general assemblies, nine per cent to language and literature, and six per cent to music.[48] There was a great variation in the terms used for the activities in the program. The majority of programs were flexible to allow for special days, seasons, excursions, outdoor play and special needs of children.[49]

A typical schedule was as follows:

8:10 - 9:20	Self-adopted activity
9:20 - 9:30	Period for replacing material
9:30 - 9:50	Conversation--discussion or problems in connection with work, discussion of health habits, of nature study, the need for being careful in crossing streets, etc.
9:50 - 10:10	Luncheon
10:10 - 10:20	Rest
10:20 - 10:30	Games and Rhythms
10:30 - 10:45	Songs and Stories[50]

General assemblies. About half of the kindergartens began with a general assembly and half with a work period. The purposes of this period were to exchange ideas, cultivate self-expression, clarify impressions, and to develop a sense of responsibility in contributing information. The beginning period was a planning period for the day, and a later one was used to examine a child's skill in using materials.[51]

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[48] *Ibid*., p. 62.

[49] *Ibid*., p. 31.

[50] *Ibid*., p. 58.

[51] *Ibid*., pp. 32-36.

Music. Music activities were tone work, ear training, rote songs, song dramatization, music appreciation, rhythm, and orchestra. The purposes of these activities were to develop listening and appreciation abilities, and skills in singing and interpreting music.[52]

Language and literature. These subjects were means of expression to broaden the child's mental horizon, to stimulate his imagination, and to give him power to express himself. Literature and oral expression were included.[53]

Work period for the general arts. Some kindergartens used one work period while others used two periods. The first work period was used for freedom of activity, while the second was used for developing some social skill in handling materials. The purposes were to develop initiative, coordinate the muscles, develop keen minds through physical activities, widen and enrich experiences, form the ability to execute self-made plans and self-expression.[54] Activities were housekeeping of the classroom, experimental and construction work with materials, and dramatic play.[55]

Physical activities. The purposes of physical activities were the development of social habits and attitudes, physical development, and to give joy through play. Physical activities were plays and games, rhythmic activities, outdoor play, rest, lunch, and housekeeping. Lunch was seldom provided in the afternoon.[56] Excursions provided opportunity to develop habits of observation and to enrich experiences.[57]

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[52] Ibid., pp. 39-40.

[53] Ibid., pp. 42-44.

[54] Ibid., pp. 115-16.

[55] Ibid., pp. 44-47.

Numbers and reading. The beginnings of number work and reading were frequently taught in kindergarten.[58]

IV. MATERIALS OF THE RECONSTRUCTED KINDERGARTEN

Suitability to the child's needs and point of view characterized the materials of the reconstructed kindergarten.[59] The materials were larger--play apparatus, paper, and most important, the building blocks. There was a greater variety of materials, and toys were an important addition. The materials provided for expression and construction, whether in art, block-building, or wood construction. The materials were available to the children in low cupboards.[60] Julia Abbot emphasized the importance of furnishing the right kinds of materials for learning to work and play with others.[61]

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[56] Ibid., pp. 51-56.

[57] Ibid., pp. 116-17.

[58] Ibid., p. 100.

[59] Ella V. Dobbs, "Methods and Equipment," Addresses and Proceedings (Washington: National Education Association, 1921), p. 466.

[60] Ibid., p. 51; and Davis, op. cit., p. 59.

[61] Catherine R. Watkins, "Changing Conceptions of the Kindergarten as the Outgrowth of New Insight," Addresses and Proceedings (Washington: National Education Association, 1922), pp. 970-74.

General assemblies. The most common activities were singing; conversation; greeting, hymn, and prayer; health inspection; nature study; and picture study.[62] Few materials were required. However, some kindergartens did have some plants and pets.[63]

Music. Music books containing songs about animals, nursery rhymes, and seasonal songs were used most often. The victrola and piano were used.[64]

Language and literature. Mother Goose rhymes, finger plays, and health and nature poems were learned. Folk tales and realistic stories of animals and home life were popular.[65]

Work period. The self-initiated projects, centered on community interests, were the center from which the general arts developed--the fine, industrial, domestic, and dramatic arts. A great variety of materials was used.[66] Paper cutting and construction, drawing with crayons, and block building were used most frequently. The next most frequent use was made of clay, paints, and housekeeping apparatus. The group next in popularity was wood construction, sewing, wooden bead stringing, pegs and peg boards, and picture books.[67] There was evidence of some use of the traditional gifts and occupations.[68]

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[62] Davis, op. cit., pp. 72, 111.

[63] Ibid., p. 66.

[64] Ibid., pp. 79-80.

[65] Ibid., p. 100.

[66] Ibid., p. 87.

[67] Ibid., p. 89.

[68] Ibid., pp. 44, 106.

Physical activities. The plays and games required very little equipment. Large play apparatus that was used frequently was the slide, swing, rocking board, walking beam, trapeze, and the see-saw.[69] About 60 per cent of the kindergartens had a lunch period. Crackers and milk were common. Bread, cake, or fruit were brought in the lunches from home.[70] Rugs, mats, cushions, or newspapers were used for resting on the floor. About half of the kindergartens played victrola music during rest time.[71] Excursions were taken most often to other classrooms, the park, pets at other children's homes, and to gardens.[72]

The materials provided for a wide range of interests and abilities of the kindergarten children. The child study movement placed the emphasis on supplying the appropriate materials for the characteristics of the kindergarten children.

V. METHODS OF THE RECONSTRUCTED KINDERGARTEN

The child study movement shifted emphasis in methods from the totally teacher-directed method to the child-initiated activity for some parts of the program. Actual practice showed that there was a distinct tendency among kindergarten teachers to develop the children's abilities to initiate their activities and their powers of self-control during the kindergarten term. There was less teacher direction as the school year progressed. The amount of teacher direction also varied with the kindergarten activities.[73]

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[69] Ibid., p. 108.

[70] Ibid.

[71] Ibid., p. 97

[72] Ibid., p. 109.

The informally organized work periods, discussion period and physical activities provided opportunities for self-directed work.[74] The children's initiative was stimulated by selecting their own activities during the work period.[75] The discussion period gave opportunity for pupil control as they discussed the day's work, planned for the next, and discussed their behavior.[76] In 1925, half of the kindergartens included free play in the program.[77] Most kindergartens had a rest period on the floor. Excursions were commonly used.[78]

The more formally organized assembly periods, music, literature and table work involved more direction from the teacher.[79] The most frequent methods in literature were telling of stories by the teacher or children, reciting rhymes and poems, discussions, and dramatizations.[80]

The project method took into account the characteristics of the child, and centered on community interests. Nina Vandewalker, in response to many requests, wrote a bulletin explaining the project method.[81] This method provided for a child to choose an activity, plan it, carry it out, and evaluate it--under teacher guidance. The process was more important than the results.[82]

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[73] Ibid., pp. 117-18.

[74] Ibid., p. 130.

[75] Ibid., p. 89.

[76] Ibid., pp. 76, 104.

[77] Ibid., p. 130.

[78] Ibid., p. 109.

[79] Ibid., p. 130.

[80] Ibid., pp. 82-83.

Teachers incorporated children's interests into their plans. Children had opportunities for self-expression and experimentation. They could make choices in activities and materials, and in group and individual work. An informal atmosphere, flexibility in the program, and the play activity, relieved some of the tension and fatigue of earlier days. The children were given more responsibility for taking care of the classroom and the lunch duties.[83] Freedom was given the children for ample physical activity. Discussion of the children's own ideas was substituted for the teacher's ideas.[84]

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[81] Nina C. Vandewalker, *Suggestions Concerning the Application of the Project Method to Kindergarten Education*, Bureau of Education Kindergarten Circular No. 12 (Washington: Department of the Interior, April, 1923).

[82] *Ibid*; Julia W. Abbot, *Kindergartens Past and Present*, Bureau of Education Kindergarten Circular No. 11 (Washington: Department of the Interior, 1923), p. 4; Samuel C. Parker, "Project Teaching: Pupils Planning Practical Activities, II," *The Elementary School Journal*, 22:427-40, February, 1922; and Catherine R. Watkins, "Changing Conceptions of the Kindergarten as the Outgrowth of New Insight," *Addresses and Proceedings* (Washington: National Education Association, 1922), pp. 970-974.

[83] Davis, *op. cit.*, pp. 95-96, 109; and Ella V. Dobbs, "Methods and Equipment," *Addresses and Proceedings* (Washington: National Education Association, 1921), p. 466.

[84] Hill, *op. cit.*, pp. 1966-67.

The kindergarten which gave attention to the child was one with a whole-hearted, purposeful activity proceeding in a social environment, where the interest of the child was important.[85]

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[85] Abbot, *op. cit.*, p. 1.

CHAPTER V

PROJECT HEAD START

I. HISTORY OF PROJECT HEAD START

Poverty is not a new phenomenon in America. What is new is a vigorous national effort to abolish poverty.[1]

It has been estimated that twenty to twenty-five per cent of the American people live in poverty.[2] In 1961 about one-fourth of all American children were growing up in poverty.[3] The problem has been increasing quantitatively. Riessman estimated that in 1950, in fourteen of the largest American cities, one child in ten was growing up in poverty, while in 1960 the ratio was one in three.[4] The disadvantaged live in slums, in the rural areas, on Indian reservations, and in migrant labor camps.[5]

Among the forces in society that have increased the problems of the disadvantaged are technology, affluence, urbanization, and rising levels of aspiration of individuals. Many families who have moved to the cities do not have a marketable skill in our technological society. Consequently, they cannot supply their basic needs. The affluence in society has widened the gap between economic groups.[6] These social changes demand literacy. The disadvantaged have been alienated from the public school because of frustration and failure.

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[1] Joe L. Frost and G. R. Hawkes, The Disadvantaged Child (Boston: Houghton Mifflin Company, 1966), p. xi.

[2] Michael Harrington, The Other America (New York: The Macmillan Company, 1962), p. 182.

[3] Frost, *op. cit.*, p. 30.

[4] Hilda Taba, "Cultural Deprivation as a Factor in School Learning," Merrill-Palmer Quarterly, 10:149, April, 1964.

[5] Frost, *op. cit.*, p. 1.

Increasing attention has been given to the failure of the schools to educate the disadvantaged child--fifteen to twenty per cent according to Tyler[7]--to become a productive member of society. A study of a large city in 1961 indicated that the failure rate was six times as high among elementary school children whose families earned $3,000 or less annually.[8] At four years of age a disadvantaged child is a year behind in school; and by the age of twelve, three or more years behind.[9]

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[6] Benjamin S. Bloom, A. Davis and R. Hess, Compensatory Education for Cultural Deprivation (Research Conference on Education and Cultural Deprivation. New York: Holt, Rinehart and Winston, Inc., 1965), pp. 1-2; Harrington, op. cit., p. 56; Martin Deutsch, "Nursery Education: The Influence of Social Programming on Early Development," The Journal of Nursery Education, 18:191, April, 1963; and Taba, op. cit., p. 148.

[7] United States Department of Health, Education, and Welfare, Office of Education, National Conference on Education of the Disadvantaged (Report of a National Conference, July 18-20, 1966. Washington: Government Printing Office, 1966), p. 63.

[8] Delmo Della-Dora, "The Culturally Disadvantaged," Exceptional Children, 28:468, May, 1962.

[9] United States Department of Health, Education, and Welfare, Office of Education, op. cit., p. 60.

The studies of Deutsch, Hunt, Hess, and others show that disadvantaged children are not prepared to handle school. They come to school with minimal communication patterns, with a negative self-concept and attitude toward school, and with a lack of cognitive concepts. The children's listening skill and attention span have not been adequately developed. The teachers frequently reject these children or have a low expectation regarding their learning achievement.[10] Educators have been faced with the problem of compensating for cultural deprivation.

Research has been an important factor in promoting compensatory preschool education. Research on disadvantaged children has been in progress since the 1930's.[11] The work in behavioral and psychological sciences has pointed out that early systematic intervention is the most effective means for eliminating later social and learning disabilities.[12] Significant research includes Bloom's conclusion that the period of most rapid growth for general intelligence comes during the preschool years and that the child's environment is one of the principal determiners of school achievement.[13] Piaget and Hunt suggest that early stimulation may be crucial in laying the psychological foundation for the capacity to process information.[14] Bruner has made a significant contribution in his research in cognitive growth.[15] Deutsch found that stimulus deprivation results in deficiencies. He recommended that a child must be reached as early as possible, particularly if he is marginal to our major cultural stream.[16] Hess worked on the hypotheses that the central factor in effects of cultural deprivation is a lack of cognitive meaning in the mother-child communication system.[17] The findings of research clearly indicate that it is possible to bring the disadvantaged children up to satisfactory stages of readiness for regular school learning.[18]

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[10] Lester D. Crow and others, "Experentially Lack of the Culturally Deprived Child," Educating the Culturally Disadvantaged Child (New York: David McKay Company, Inc., 1966), p. 117; Frost, op. cit., pp. 55-59, 378; Heffernan, op. cit., p. 237; and Calvert R. Orem (ed.), Montessori for the Disadvantaged (New York: G.P. Putnam's Sons, 1967), pp. 38-41.

[11] Fred M. Hechinger (ed.), Pre-School Education Today (Garden City, New York: Doubleday and Company, Inc., 1966), pp. 146-50.

[12] Deutsch, op. cit., p. 191.

[13] Benjamin S. Bloom, Stability and Change in Human Characteristics (New York: John Wiley and Sons, Inc., 1964), pp. 104, 110, 118.

Many experimental preschool programs, aimed at compensating for cultural deprivation, were begun in the 1960's. Preschool experiences had been endorsed by the White House Conferences on Education, the National Education Association, and the Council of Chief State School

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[14] *Ibid.*, p. 81; Taba, *op. cit.*, p. 152; and Frost, *op. cit.*, pp. 6-7.

[15] Jerome S. Bruner, "The Course of Cognitive Growth," *American Psychologist*, 19:1, January, 1964.

[16] Harry A. Passow (ed.), *Education in Depressed Areas* (New York: Bureau of Publications, Teachers College, Columbia University, 1963), pp. 64-69; and Deutsch, *op. cit.*, p. 196.

[17] Robert D. Hess and V. Shipman, "Early Blocks to Children's Learning," *The Disadvantaged Learner: Knowing, Understanding, Educating*, Staten W. Webster, ed. (San Francisco: Chandler Publishing Company, 1966), p. 296.

[18] Benjamin S. Bloom, A. Davis and R. Hess, *Compensatory Education for Cultural Deprivation* (Research Conference on Education and Cultural Deprivation. New York: Holt, Rinehart, and Winston, Inc., 1965), p. 16.

Officers.[19] Getzels reported that by 1965 preschool programs were in operation in seventy cities. Over half of them had been established in the last two years.[20] The Ford Foundation gave grants for compensatory education at the preschool level to many cities; among them were Baltimore, New Haven, New York City, San Francisco, and Washington, D.C.[21] Common elements in the programs were small class size, parent involvement, interdisciplinary staffing, and the use of volunteers.[22] The programs, in addition to the usual social and emotional development, included auditory and visual attention, language development and other cognitive functions.[23]

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[19] Education U.S.A. (ed.), "First Things Before First Grade," The Shape of Education for 1964-65 (Washington: National School Public Relations Association, National Education Association, 1964), p. 13; and J. W. Getzels, "Pre-School Education," Contemporary Issues in American Education (Consultants' Papers for the White House Conference on Education, July 20-21, 1965. United States Department of Health, Education, and Welfare, Office of Education. Washington: Government Printing Office, 1965), p. 106.

[20] Hechinger, *op. cit.*, p. 8.

[21] Helen K. Mackintosh, L. Gore and G. M. Lewis, Educating Disadvantaged Children Under Six, No. 1 (United States Department of Health, Education, and Welfare, Office of Education, Washington: Government Printing Office, 1965), p. 2.

[22] James L. Hymes, "Emerging Patterns in Early Childhood Education," Young Children, 22:158-61, January, 1967; "What the Preschool Programs Learned About the Deprived Child in New Haven, Connecticut, Dade County, Florida, and Baltimore, Maryland," Grade Teacher, 83: 74-79, 103-104, 126, 180-84, September, 1965; Doxey Wilkerson, "Programs and Practices in Compensatory Education for Disadvantaged Children--Preschool Programs," Review of Educational Research, 35:434-37, December, 1965; and Edmund G. Gordon and D.A. Wilkerson, "Preschool Programs," Education for the Disadvantaged (New York: College Entrance Examination Board, 1966), pp. 47-53.

[23] *Ibid.*, p. 48.

Other current experimental programs are more structured. The basis for structure is the belief that in order to compensate for deprivation, a more systematic approach than the traditional preschool program, is needed. Deutsch's longitudinal experiment in New York City is designed to expose the child to an environment demanding development and stimulating it along certain parameters, and to maintain gains. The techniques center around the areas of cognitive functioning, memory training, language development and motivation.[24] Gray's experiment in the upper south attempts to build motivation for learning and to teach for concept and language development. The approaches and materials are similar to the kindergarten except that specific needs of children are identified and lessons are developed to meet these needs.[25] Robison and others developed the key concept approach.[26] In the academically oriented preschool of Bereiter and Engelman, specific and significant educational objectives in language, reading and arithmetic were selected and taught in a direct manner.[27] The

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[24] Martin Deutsch and associates, The Disadvantaged Child (New York: Basic Books, Inc., 1967), pp. 21-23; and Bernard Spodek, "Poverty, Education, and the Young Child," Educational Leadership, 22:599, May, 1965.

[25] Susan W. Gray and others, "The Early Training Project: An Overview," Before First Grade (New York: Teachers College Press, Teachers College, Columbia University, 1966), p. vii; and Susan W. Gray and R. A. Klaus, "An Experimental Preschool Program for Culturally Deprived Children," Child Development, 36:887-98, December, 1965.

[26] Rose Mukerji and H. F. Robison, "Teaching Strategies for Disadvantaged Kindergarten Children," Young Children, 21:195-99, March, 1966.

[27] Hechinger, op. cit., pp. 106-108; and Carl Bereiter, "Are Preschool Programs Built the Wrong Way?" Nation's Schools, 77:55-56, June, 1966.

Montessori programmed materials are being used by Rambusch in New York as well as in some Head Start Centers.[28] All of the experiments have been successful to some degree. Important aspects of a quality program have been language and concept development.[29] Much more evaluative research and long-term planning are needed to establish effective pre-school compensatory programs.[30]

In August, 1964 the federal government became involved in the war on poverty through the passage of the Economic Opportunity Act.[31] The purpose of the war on poverty is to serve as a pivot for experiment and a focus for change.[32] The rationale for the Project Head Start portion of the law came from the Arden House Conference on Preschool

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[28] Orem, op. cit., pp. 91-92; and Ronald R. Koegler and L. Pearce, "Early Education for the Culturally Disadvantaged," The American Montessori Society Bulletin, 3:1-7, Fall, 1965.

[29] United States Department of Health, Education, and Welfare, Office of Education, National Conference on Education of the Disadvantaged (Report of a National Conference, July 19-20, 1966. Washington: Government Printing Office, 1966), p. 24.

[30] Getzels, op. cit., p. 112; Deutsch, op. cit., p. 6; Passow, op. cit., pp. 332-51; and Hechinger, op. cit., p. 9.

[31] United States Congress, House of Representatives, Committee on Education and Labor, Economic Opportunity Amendments of 1965, Report, 89th Congress, 1st Session, on H.R. 8283, May 27, 1965 (Washington: Government Printing Office, 1965).

[32] Office of Economic Opportunity, The Quiet Revolution (Washington: Government Printing Office, 1967), p. 4.

Enrichment,[33] as well as from the work of Bruner, Deutsch, and Bloom.[34] The law has been amended and continued to date.

Project Head Start is under the Community Action Program. Community action seeks to mobilize all the important resources of a community to combat poverty through a variety of projects. The flexibility of funding is to enable a community to mobilize its own public and private resources, to develop programs of sufficient size and scope, to involve the poor in the development and operation of programs, and to administer such programs through public or private agencies or a combination of such agencies that will combat poverty effectively.[35] The law authorizes the Director to carry out programs for preschool children which include the furnishing of comprehensive health, nutritional, social, educational, and mental health services to aid children to attain their greatest potential; the provision of appropriate activities to encourage the participation of parents of such children; and other training, technical assistance, evaluation, and follow-through activities as may be necessary.[36]

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[33] Martin Deutsch, "Papers from the Arden House Conference on Pre-School Enrichment," Merrill-Palmer Quarterly, 10:207-208, July, 1964; and Evangeline Burgess, "Preschool Experience for Culturally Disadvantaged Children," Values in Early Childhood Education (Department of Elementary-Kindergarten-Nursery Education. Washington: National Education Association, 1965), p. 50.

[34] Frederick Shaw, "The Changing Curriculum--Political Influences on the Curriculum," Review of Educational Research, 36:347, June, 1966; and Frost, op. cit., p. 135.

[35] United States Congress, Senate, Committee on Labor and Public Welfare, Economic Opportunity Amendments of 1966, Report together with Supplemental, Individual, and Additional Views, 89th Congress, 2nd Session, on S. 3164, September 28, 1966 (Washington: Government Printing Office, 1966), p. 13.

Project Head Start was announced in February, 1965 and was launched in a 1965 eight-week summer program. The recommendations of the planning committee of child development experts were followed in planning Head Start.[37] Letters poured in for a year-round program, and this was initiated in September, 1965.[38] Summer and year-round programs are now being conducted. By the end of the current school-year, a total of 373,000 children will have attended full-year Head Start programs; and 1,653,000 children, summer programs.[39] Head Start programs are needed for over two million children each year.[40] The average cost per child has been $1,200 for a full-year.[41] Orton predicted that after a first-year budget of $85 million, the second year's budget would be $180 million; and the third, $310 million.[42] The budget for the current school year is $224 million. The program began with the federal government paying 90 per cent of approved costs. Since June, 1967 the federal government pays 80 per cent of the cost.[43] Public school systems run 38 per cent of the programs; private or parochial schools, seven per cent; and non-profit organizations, 55 per cent of the programs.[44] These programs are financed by the federal government.

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[36] United States Congress, *Economic Opportunity Act of 1964, as Amended*, Amendments included through December 1, 1966 (Washington: Government Printing Office, 1967), p. 27.

[37] Robert Cooke, "Improving the Opportunities and Achievements of the Children of the Poor," Planning Committee Project Head Start, 1965. (Mimeographed.)

[38] Julius B. Richmond, "Beliefs in Action," *Childhood Education*, 44:4, September, 1967.

[39] *Ibid.*

[40] Jule M. Sugarman, Office of Economic Opportunity, an Address at the Association for Childhood Education International Work-Study Conference, March 28, 1967, Washington, D.C.

[41] William D. Boutwell, "Education? Help for Head Start," *The PTA Magazine*, 61:16, April, 1967.

The full-year programs are primarily designed for children from the age of three up to the age when the child enters the school system, while the summer programs are operated for children who will enter the school system in the fall. At least 90 per cent of the children must be eligible under the family income standards as listed in the Manual of Policies.[45] An important regulation is the non-discrimination condition for Head Start programs.[46] The recommended class size is fifteen children under the guidance of one teacher and two aides.[47]

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[42] Richard E. Orton, Office of Economic Opportunity, an Address at the Association for Childhood Education International Work-Study Conference, April 4, 1966, Chicago.

[43] United States Office of Education and the Office of Economic Opportunity, Education: An Answer to Poverty (Washington: Government Printing Office, 1966), p. 3; and Community Action Program, "Community Action Program Fact Sheet" (Washington: Office of Economic Opportunity, March, 1967). (Mimeographed.)

[44] Sugarman, loc. cit.

[45] Office of Economic Opportunity Community Action Program, Head Start Child Development Programs--A Manual of Policies and Instructions (Washington: Government Printing Office, September, 1967), p. 7.

[46] Ibid., Appendix, p. A-35.

The Head Start program is administered through the Office of Economic Opportunity in Washington and its seven regional offices.[48] Assistance has been provided through the use of 550 consultants from the fields of education, health, social services, nutrition, psychology, and administration.[49] Personnel for local Head Start Centers are trained in forty-hour summer orientations and through eight-week programs at various colleges and universities.[50]

Two new programs have been added. Follow-through began in the fall of 1967 with thirty pilot programs of 3,000 children, costing $2,500,000 for the purpose of maintaining the gains made in Head Start. It is anticipated that the program will be expanded through grade three, and that the cost for 1968-69 will be $120 million for 190,000 children.[51] Parent and Child Centers will be provided in sixteen cities for children younger than three years of age. The budget of $5 million for 1968 will be for a comprehensive program.[52] The aim is to give young parents the know-how necessary in child raising and family development to eventually get their child into the mainstream of American life.[53]

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[47] Community Action Program, Office of Economic Opportunity, How to Apply for a Head Start Child Development Program (Washington: Government Printing Office, September, 1966), p. 23.

[48] Office of Economic Opportunity, The Quiet Revolution (Washington: Government Printing Office, 1967), p. 83.

[49] Richmond, op. cit., p. 5.

[50] Ibid.

[51] Nolan Estes, "Follow Through," American Education, 3:12, September, 1967; and "The Aims of 'Follow Through'," Phi Delta Kappan, 49:62, September, 1967.

Many claims for the success of Project Head Start have been made. Successes reported most often have been an awareness of the educational needs of poor children; improvement in communication, social behavior, and self-confidence of children; better parental attitudes toward school and parental involvement; and the cooperation of a multiplicity of services. Head Start has established the idea that the early years are of prime significance for learning.[54]

The research conducted by the Office of Economic Opportunity has pointed out that the results have been positive for programs and facilities but not as positive for health and social services.[55] Also, when parents have been reached by people who know the program, and who know how to communicate, the parents' response has been overwhelmingly favorable.[56] Sugarman stated that $1 million for research had been a "flop," because we do not yet know how to effectively measure early childhood education.[57] After the first summer, Eisenberg found an eight to ten point rise in the intelligence quotient[58] while Wolff's study indicated a problem of maintenance of gains.[59] Kittrell reported at the end of the first year of a three-year study, that the children's intelligence quotient increased by twenty-five points, and that they were eager and interested.[60] A more recent study found that the hard-core culturally deprived families and the mobile poor have not been reached.[61] At least seventy-five investigations using a variety of techniques are in progress.[62]

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[52] "Ghetto Parent Education," Phi Delta Kappan, 49:283, January, 1968.

[53] "Schools Make News," Saturday Review, 50:74, October 21, 1967.

[54] Eveline B. Omwake, "From the President," Young Children, 23:131, January, 1968; William F. Brazziel, "Two Years of Head Start," Phi Delta Kappan, 48:346, March, 1967; Richmond, op. cit., pp. 4,7; Dorothy Levens, "A Look at Project Head Start," Childhood Education, 42:482, April, 1966; Philip Hardberger, "The Watershed," Communities in Action, 2:8, April-May, 1967; and Office of Economic Opportunity, The Quiet Revolution (Washington: Government Printing Office, 1967), p. 15.

[55] Julius B. Richmond, "Communities in Action: A Report on Project Head Start," The Reading Teacher, 19:329-30, February, 1966.

Project Head Start has not been without problems. Problems of a qualified staff, adequate management of funds, conflicts between local community action personnel and local school officials, adequate parent participation, quality in quick expansion, and adjustment in subsequent grades, remain to be resolved.[63] A study in the summer of 1966 of 424 Head Start Centers indicated that 213 were deficient in parent participation while only thirty-six were strong in this area. Every program that had an effective parent advisory board was found to be free of major defects.[64]

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[56] Office of Economic Opportunity, Head Start Newsletter, 1:1, November, 1966.

[57] Sugarman, op. cit.

[58] James Doherty, "Pupil-Teacher Ratio in Head Start Centers," Childhood Education, 43:7, September, 1966.

[59] Brazziel, op. cit., p. 346.

[60] Flemmie P. Kittrell in an address to the Head Start trainees at the University of Nebraska, July 7, 1967.

[61] Frank M. Loewenberg, "Who Did NOT Attend Head Start?" Childhood Education, 43:310, January, 1967.

[62] Office of Economic Opportunity, Head Start Newsletter, 2:2, July, 1967.

The program has had its critics. In addition to questioning the wisdom of separating the disadvantaged children and the cost of the program as compared to the results,[65] the curriculum itself has been criticized. Recommendations based on research have been made for a very different program from the traditional middle-class kindergartens.[66] Deutsch feels there is an absence of evaluation of the relationship between specific aspects of enrichment programs and specific change.[67] Passow feels there is little known about class size or about appropriate ways to prepare those who will teach the disadvantaged.[68]

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[63] United States Congress, House of Representatives, Committee on Education and Labor, op. cit., p. 56; Polly Greenberg, "CDGM. . . An Experiment in Preschool for the Poor--by the Poor," Young Children, 22:307-15, May, 1967; Office of Economic Opportunity, op. cit., p. 7; "Thirty Two Billion Dollars--How It's Portioned Out--Head Start," School Management, 10:67, December, 1966; United States Congress, Senate, Committee on Labor and Public Welfare, op. cit., pp. 80-88; Office of Economic Opportunity, The Quiet Revolution (Washington: Government Printing Office, 1967),p. 33; and Orton, loc. cit.

[64] Office of Economic Opportunity, Head Start Newsletter, 2:4, January, 1967.

[65] Deborah Wager, "The Ten Biggest Myths About OEO," Communities in Action, 2:22, April-May, 1967; Richard K. Kerckhoff, "Race and Social Class as Opportunities for Early Childhood Education," Young Children, 20:361, September, 1965; and Donald L. Mag[illegible] "Will Success Spoil Head Start?" Christian Science Monitor, Jan[illegible] 5, 1966, p. 9.

[66] Bloom, Davis, Hess, op. cit., p. 1[illegible] and Maya Pines, "Slum Children Must Make Up for Lost Time," New [illegible] Times Magazine, October 15, 1967, p. 66.

Few programs have captured the interest and support of all segments of American life as has Project Head Start.[69] A Harris poll of April, 1967 showed that the American public was 60 per cent behind the war on poverty.[70] If the children are not learning in school, then the fault lies with the curriculum, organization, and methods of the school.[71] It will eventually cost enormously more than what is now being allocated in order to do the necessary research, application, retraining, and social reorganization to achieve permanent results.[72]

II. AIM OF PROJECT HEAD START

Project Head Start is one of the projects of the Community Action Program. The long-range objective of the Community Action Program is to affect a permanent increase in the ability of individuals, groups and communities afflicted with poverty to improve their own conditions,[73] and to break the cycle of poverty at its most critical point--during the child's formative years.[74]

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[67] Martin Deutsch and associates, The Disadvantaged Child (New York: Basic Books, Inc., 1967), p. 6.

[68] United States Department of Health, Education, and Welfare, Office of Education, op. cit., p. 24.

[69] Hugh V. Perkins, "Federal Participation and Its Results," Educational Leadership, 24:41, October, 1966.

[70] Hardberger, op. cit., p. 9.

[71] Deutsch, op. cit., p. ix.

[72] Ibid., p. 28.

The broad goals of the Head Start Child Development programs are:

1. Improve the child's health.
2. Help the child's emotional and social development by encouraging self-confidence, self-expression, self-discipline and curiosity.
3. Improve and expand the child's ability to think, reason and speak clearly.
4. Help children to get wider and more varied experiences which will broaden their horizons, increase their ease of conversation and improve their understanding of the world in which they live.
5. Give the child frequent chances to succeed.
6. Develop a climate of confidence for the child which will make him want to learn.
7. Increase the child's ability to get along with others in his family and, at the same time, help the family to understand him and his problems--thus strengthening family ties.
8. Develop in the child and his family a responsible attitude toward society and foster feelings of belonging to a community.
9. Plan activities which allow groups from every social, ethnic and economic level in a community to join together with the poor in solving problems.
10. Offer a chance for the child to meet and see teachers, policemen, health and welfare officers--all figures of authority--in situations which will bring respect and not fear.
11. Give the child a chance to meet with older children, teenagers, and adults who will serve as "models" in manners, behavior, and speech.

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[73] Office of Economic Opportunity Community Action Program, Head Start Child Development Programs--A Manual of Policies and Instructions (Washington: Government Printing Office, September, 1967), p. 1.

[74] Charles S. Carleton, "Head Start or False Start," American Education, 2:20, September, 1966.

12. Help both the child and his family to a greater confidence, self-respect and dignity.[75]

III. CURRICULUM OF PROJECT HEAD START

The components of the comprehensive Project Head Start program are health, social services, parent involvement, volunteers, and education. Each component includes diagnostic, remedial, and developmental efforts.[76] Each center is encouraged to use imaginative and innovative methods to develop and operate effective programs within the framework of Head Start policies.[77]

The objective of the health program is to assure the child's present and future function by examining and treating existing health problems, by preventing future problems through immunization and health education, and by influencing the community to provide better health services for all of its poor children.[78] Nutrition is a part of the health program. Snacks, lunch, and breakfasts may be provided in the program. Children learn to eat a variety of foods, to use utensils, and to enjoy organized dining.[79]

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[75] Office of Economic Opportunity Community Action Program, op. cit., pp. 2-3.

[76] Office of Economic Opportunity, Project Head Start Fact Sheet, 1967, p. 4.

[77] Office of Economic Opportunity Community Action Program, op. cit., p. 49.

[78] Office of Economic Opportunity, The Physician and Project Head Start (Washington: Government Printing Office, 1967), p. 4; and Office of Economic Opportunity, Project Head Start--Health Services, No. 2 (Washington: Government Printing Office, 1967), p. 5.

The social services assist the families in solving their many social problems. The existing social services in the community are utilized.[80] The basic services are the intake service, parent education, an informal counseling service, emergency transportation service, a small emergency financial aid service, home visitation, and a referral service.[81]

The community action programs are to provide for "maximum feasible participation of the poor." The purpose of involving the parents is to encourage them to assume responsibility in dealing with their problems.[82] Parents may be involved in Head Start by cooperating in the education of their children, by participating in the program as paid or volunteer staff members, and through parent education programs that reflect their interests and needs.[83] One of the major goals of Head Start is the opportunity for parents to take part in making decisions as members of planning and advisory groups.[84]

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[79] Office of Economic Opportunity, *Project Head Start--Nutrition*, No. 3 (Washington: Government Printing Office, n.d.), pp. 2-5.

[80] Richmond, *op. cit.*, pp. 327-28.

[81] Office of Economic Opportunity, *Project Head Start--Social Services*, No. 8 (Washington: Government Printing Office, n.d.).

[82] Richmond, *loc. cit.*

[83] Office of Economic Opportunity, *Project Head Start--Parents Are Needed*, No. 6 (Washington: Government Printing Office, n.d.), pp. 3-14.

[84] Office of Economic Opportunity, *Project Head Start--Points for Parents*, No. 10 (Washington: Government Printing Office, 1967), p. 14.

An innovative feature of Head Start is the extensive use of volunteers of all ages and backgrounds. Volunteers can relieve regular staff members of routine duties, can utilize their professional skills in the program, and can work with children.[85]

The educational aspect of the program includes all of the experiences in the daily program in each child development center that meet the needs of the children enrolled in a particular program. The curriculum is developmental in nature and is designed to affect the child's motivation and attitudes, as well as his social, cognitive perceptives and language skills.[86]

The purposes of the educational program are to help children:

1. Learn to work and play independently, at ease about being away from home, and able to accept help and direction from adults.
2. Learn to live effectively with other children, and to value one's own rights and the rights of others.
3. Develop self-identity and a view of themselves as having competence and worth.
4. Realize many opportunities to strive and to succeed--physically, intellectually and socially.
5. Sharpen and widen language skills, both listening and speaking.
6. Be curious--to wonder, to seek answers to questions.
7. Strengthen physical skills, using large and small muscles.
8. Grow in ability to express inner, creative impulses--dancing, making up songs, painting, handicrafts, etc.

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[85] Richmond, *loc. cit.*; and Office of Economic Opportunity, *Project Head Start--Volunteers*, No. 5 (Washington: Government Printing Office, n.d.), p. 2.

[86] Office of Economic Opportunity Community Action Program, *op. cit.*, pp. 35-36; and Office of Economic Opportunity, *Project Head Start--Daily Program I*, No. 4(Washington: Government Printing Office, n.d.), p. 12.

9. Grow in ability to channel inner, destructive impulses--to turn aggression into hard work, talk instead of hit, understand the difference between feeling angry and acting angry, and feel sympathy for the troubles of others.[87]

The guiding principles for developing the daily program are:

1. Opportunity for child-initiated activities.
2. Evidence of attention to present growth needs of children.
3. Flexibility and adaptability to meet special situations.
4. Variety of activities.
5. Rhythm of activities: quiet-active, indoor-outdoor, individual-group.
6. Development of exploration, communication, wonder, and curiosity about the environment.
7. Use of equipment suitable for preschool children.[88]

A representative schedule for a half-day session may include the following activities:

- Arrival at the center
- Breakfast may be served
- Work-play activity period--75 minutes
  - Browsing and using books, pictures, record, audio-visual materials
  - Dramatic play
  - Block building
  - Creative experiences with unstructured media
  - Activities with structured and symbolic media
  - Informal experiences in language, literature, science, mathematics, and music
- Transition period
  - Cleaning and putting away materials
  - Midmorning snack
- Outdoor work-play--60 minutes
- Meal time
- Departure[89]

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[87] *Ibid.*, p. 8.

[88] Office of Economic Opportunity Community Action Program, *op. cit.*, p. 6.

[89] Minnie P. Berson, *Project Head Start--Daily Program III*. No. 11. Office of Economic Opportunity (Washington: Government Printing Office, 1967), pp. 9-43.

All programs must be scheduled for at least fifteen hours per week. Three-hour sessions are suggested. Some Child Development Centers plan an all-day care program, with a three-hour core of work-play. Some centers schedule sessions four days a week and use the fifth day for planning, staff meetings, and home visitations.[90]

IV. MATERIALS OF PROJECT HEAD START

The policy for equipment for the educational program states that "furniture, equipment and toys for a Head Start Center shall be available in sufficient quality and quantity to support the program fully."[91]

A wide variety of safe, sturdy and durable toys and educational materials are provided. The furniture is to be safe and comfortable. Equipment and supplies may come from several sources. They may be purchased, borrowed, rented, donated, or made.[92]

Costs of consumable supplies are allowable in full-year and summer programs. Non-expendable equipment may be purchased for full year programs only. Any equipment costing over $500 must receive specific approval from the Office of Economic Opportunity regional office.[93]

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[90] Office of Economic Opportunity, Project Head Start--Daily Program I, No. 4 (Washington: Government Printing Office, n.d.), pp. 4, 19-21; and Office of Economic Opportunity Community Action Program, op. cit., pp. 36-37.

[91] Ibid.

[92] Ibid.

The Office of Economic Opportunity booklets on the daily programs[94] and on *Equipment and Supplies*[95] provide recommendations for equipment. The quantity recommended for supplies and equipment is generous. Another publication[96] gives many suggestions for use of inexpensive materials and items that are normally discarded. Some Head Start programs report effective use of the talking typewriter[97] and of new audio-visual resources.[98]

A summary of suggested equipment for a class of fifteen children is as follows:

Blocks	hardwood unit blocks
Floor play materials	transportation toys, figures of animals and people

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[93] *Ibid.*

[94] Berson, *op. cit.*; and Office of Economic Opportunity, *Project Head Start--Daily Program I*, No. 4 (Washington: Government Printing Office, n.d.).

[95] Office of Economic Opportunity, *Project Head Start--Equipment and Supplies* (Washington: Government Printing Office, n.d.).

[96] Office of Economic Opportunity, *Beautiful Junk--Project Head Start* (Washington: Government Printing Office, 1967).

[97] "In An OEO Center," *American School and University*, 39:24, March, 1967; and Bereiter, *op. cit.*

[98] Henry W. Ray, "Audiovisual Resources in Head Start," *Audiovisual Instruction*, 11:545-46, September, 1966.

Household and dramatic play	dolls and doll accessories playhouse furniture, dishes, accessories housekeeping equipment dress-up clothes full-length mirror supplies for other dramatic play
Table activities	puzzles and rack pegs and peg boards, large dominoes matching games sets of small blocks nested blocks and color cone hammer and nail sets Cuisenaire rods, counting frames, abacus, letter and number sets
Art activities	easels, brushes,* tempera paints large newsprint and manila paper crayons, scissors, paste, paste brushes construction and finger paint paper* dough* miscellaneous supplies
Woodwork	workbench with vises tools, nails, screws, sandpaper soft wood scraps, doweling
Music	phonograph and records autoharp, xylophone, rhythm instruments balls, hoops, scarves
Science and special projects	magnets, magnifying glass, thermometers measuring equipment--tape measure, scales, cups, etc. batteries, light bulbs, electric wire hand mirrors hot plate, electric frying pan aquarium, terrarium, cages for pets typewriter, pulleys and gears
Water play	assortment of containers, funnels, etc. soap and soap flakes

*Full-year program only

Literature	picture story books
Furniture	chairs and tables mats for resting and lockers
Audio-visual aids	tape recorder, slide projector 8 mm. loop, 16 mm. movie projector screen
Food service	stove and refrigerator, cooking utensils dishes and silverware trays and serving dishes
Permanent facilities	low, open shelves for storage and display high shelves and cabinets for storage 3 each--toilets, sinks, and mirrors work sink in classroom
Outdoor equipment	sandbox and accessories jungle gym, ladder box, horizontal ladder wheel toys wooden packing cases, hollow wooden blocks low saw horses, small wooden kegs walking and jumping boards rope and garden hose tires and inner tubes rubber balls of different sizes, bean bags[99]

Meal patterns serve as guides for local Head Start nutritionists. The patterns are:

Pattern for breakfast:

Fruit or fruit juice
Milk
Cereal, bread or roll plus one or more of the following:
  piece of cheese, egg (hard cooked or scrambled),
  peanut butter

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[99] Berson, _op. cit._; and Office of Economic Opportunity, _Project Head Start--Equipment and Supplies_, No. 9 (Washington: Government Printing Office, n.d.).

Mid-morning or mid-afternoon snack:

Include one or more of the following:
fruit, raw vegetable pieces, milk, piece of cheese, juice (fruit or vegetable)

Pattern for lunch:

Meat, poultry, fish, egg, cheese, peanut butter, dried peas, dried beans (choose one)
Bread and butter or margarine
Raw or cooked vegetables
Fruit or other dessert
Milk[100]

The space and equipment are organized to facilitate the child's development. The arrangement of space depends on local facilities and children's needs. Needed are places for quiet times, areas for active physical work, large sections and small, open spaces and more contained ones.[101]

Rooms are needed for medical examinations, parent-teacher conferences, staff meetings, and perhaps baby-sitting. Fire and health department rulings must be met for all facilities.[102]

V. METHODS OF PROJECT HEAD START

Children at the Head Start Center learn chiefly through play activity. The children are guided by adults who respond to children's interests, and through questions and answers and planned new experiences, extend those interests to wider learnings and new competencies.[103]

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[100] Office of Economic Opportunity, Project Head Start--Nutrition, No. 3 (Washington: Government Printing Office, n.d.).

[101] Office of Economic Opportunity, Project Head Start--Daily Program I, No. 4 (Washington: Government Printing Office, n.d.), p. 10.

[102] Ibid., p. 9.

Activities in play include construction, large muscle activity, and dramatic play.

Children are given choices and opportunity to move about. The adults lend support to the work of individual and small clusters of children. The teacher and aides are alert to opportunities for the teachable moment. Through the materials the children are enabled to learn in natural spontaneous and pleasurable ways and to learn through direct experiences, experimentation, manipulation, their senses, and their contacts with people.[104]

The adults tell or read stories, teach finger plays, have a conversation with, and listen to the children; use games to develop cognitive knowledge, and show them how to use equipment and materials. Walks, trips, and excursions are recommended for a part of the group at one time.[105] An important function of a Head Start teacher is to help the children build a positive self-image through satisfying experiences, through gaining identity, and through gaining competence.[106]

A good Head Start teacher diagnoses the gaps and plans a sequence of experiences to fill in the gap.[107]

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[103] Ibid., p. 17.

[104] Berson, op. cit., p. 26.

[105] Ibid., p. 36.

[106] Office of Economic Opportunity, op. cit., pp. 26-27.

[107] "The Early Years," Grade Teacher, 84:119, December, 1966.

CHAPTER VI

AN IDENTIFICATION BY SELECTED AUTHORITIES OF THE NECESSARY FACTORS TO BE INCLUDED IN A GOOD PRESCHOOL PROGRAM AND INFLUENCES OF THE SELECTED PRESCHOOL MOVEMENTS

Authorities in preschool education were used to establish the criteria for a good modern preschool. The authoritative sources were analyzed to determine the criteria of each area in the outline; namely, the aim, curriculum, materials, and methods. The most important items for each area in the outline as indicated by the authorities were selected as factors for analysis. The factors which were analyzed were then synthesized in order to arrive at a comprehensive composite of the criteria. If three of the four authorities agreed on a factor, it was included in the synthesis. The synthesized criteria of each area of the outline were compared to the respective section of the preschool movement to determine the influence of that part of the preschool movement.

I. AIM OF THE PRESCHOOL

Criteria for the Aim of the Preschool

The general aims for the current preschool of each authority in preschool education are listed in Table I. The general aims are synthesized in Table II.

All authorities emphasized the adaptation of the preschool experiences to the child's developmental level and rate of learning,

TABLE I

ANALYSIS OF GENERAL AIMS OF THE PRESCHOOL AS IDENTIFIED BY SELECTED AUTHORITIES*

Authority	General Aim
Foster Headley	The kindergarten attempts to give the child of five an education which is appropriate to his stage of development, which will be immediately satisfying to him, and which will help him build good foundations for years ahead. The child will develop all his powers--physical, emotional, mental, and social.
Heffernan Todd	The preschool meets the basic needs of children. The basic needs are: self-confidence, belonging to the group, achievement, freedom from fear and guilt, a variety of experiences and love. These vary in emphasis as abilities, values, and purposes differ.
Leeper Dales Skipper Witherspoon	The goal of good schools for young children is to provide a succession of experiences whereby each child may have the opportunity to develop at his own rate in personal values and skills, academic learnings, group values and relationships in partnership with parents.
Wills Lindberg	To define long-term goals for a kindergarten class, consider how children can be helped to develop a positive self-image, social responsibility, creative response and expression, communicative skills, foundation for future academic work, appropriate attitudes toward school, intellectually, and to become a vital member of their society. Aims begin with the needs of the children.

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*Neith E. Headley, Education in the Kindergarten (New York: American Book Company, 1966), pp. 44-48; Helen Heffernan, The Kindergarten Teacher (Boston: D.C. Heath and Company, 1960), p. 26; Sarah Hammond Leeper and others, Good Schools for Young Children (New York: The Macmillan Company, 1968), pp. 57-59; and Clarice Wills and L. Lindberg, Kindergarten for Today's Children (Chicago: Follett Publishing Company, 1967), pp. 84-85.

and the setting of specific goals for specific groups and individuals.[1]

TABLE II

SYNTHESIS OF AIMS OF THE PRESCHOOL AS IDENTIFIED BY SELECTED AUTHORITIES

1. Provide a variety of experiences adapted to the developmental needs of kindergarten children
2. Help kindergarten children develop a positive self-concept
3. Guide the children to become socially responsible
4. Assist children in building a foundation for the years ahead
5. Guide the children toward emotional stability

Influences on the Aims of the Preschool from the Selected Preschool Movements

The Froebel kindergarten. The kindergarten in America is a tribute to Froebel. He started the kindergarten and implanted the idea that young children could be educated. The aim of Froebel's kindergarten was to make the needs and demands of the child's world correspond to the present stage of his development. The aim of adapting the experiences to the developmental needs of preschool children is still an important one today as stated in Table II. Froebel based his identification of a particular stage of development on insight, intuition, and observation. Techniques for identifying the developmental level of children have improved considerably since Froebel's time. Froebel was also aware of the value of social development of children in that he believed an informal atmosphere and group activity were conducive to growth and development.

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[1] Neith E. Headley, Education in the Kindergarten (New York: American Book Company, 1966), p. 44; Helen Heffernan, The Kindergarten Teacher (Boston: D.C. Heath and Company, 1960), pp. 23-25; Sarah Hammond Leeper and others, Good Schools for Young Children (New York: The Macmillan Company, 1968), pp. 56, 64-65; and Clarice Wills and L. Lindberg, Kindergarten for Today's Children (Chicago: Follett Publishing Company, 1967), pp. 84-85.

Froebel left an indelible conception of education as a process of growth.[2]

Montessori movement. The aim of Montessori education was to develop or set free the child's personality. The child was then motivated to develop self-mastery and a sense of responsibility. The child selected the apparatus according to his developmental level, and mastered it. There is no supportive evidence that this aim of Montessori education influenced the modern preschool.

The Montessori aim of developing a sense of responsibility did influence the American preschool. The child learned to be responsible first to himself and then to take responsibility for care of the environment.

The child study movement and the reconstructed kindergarten. The aim of the reconstructed kindergarten was to develop the child's physical powers, his reasoning capacity, his instincts or interests, and his social tendencies. This aim influenced several goals of the modern preschool as stated in Table II.

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[2] Patty S. Hill, Kindergarten, Reprint from the American Educator Encyclopedia, 1942 (Washington, D.C.: Association for Childhood Education International, 1967), p. 1961.

Much more attention was given to the child's needs for healthful living and physical development as a result of this movement. The reasoning capacity of the child was developed through selecting, planning, and executing his projects to assist him in building a foundation for the years ahead. The child was given the freedom to pursue his interests, and to make choices according to his developmental needs. The formal atmosphere was changed to an informal one to help children develop social responsibility.

The aims of the modern preschool of providing for health and physical development, for learning to think and to build a foundation for the years ahead, for meeting the developmental needs of children and for developing social responsibility, were influenced by the child study movement.

Project Head Start. The aims of Project Head Start are directed toward a specific segment of the population--the disadvantaged young child. The influence the aims of Head Start will have on the aims of the modern kindergarten is yet to be determined. The aims of Head Start include all of the aims of the modern preschool. In addition, the increased emphasis on health and language development, the co-operation of social services in a community to provide services for the families, and the use of more adult models and parent involvement, may serve to broaden the aims of the modern preschool.

II. CURRICULUM OF THE PRESCHOOL

Criteria for the Curriculum of the Preschool

The curriculum of the modern preschool provides a broad background of experiences to achieve its goals. There was general agreement by the authorities on the specific aspects and the purposes of the preschool program.

The analysis of the purposes of each area of the curriculum as identified by the selected authorities is shown in Table III. The purposes are synthesized in Table IV. The informal work and play periods incorporate a number of areas; such as, science, social studies, language, mathematics, stories, and art activities. The child initiates these activities most of the time. The main purposes of these periods are to encourage social development, planning and carrying out of plans, intellectual development, self-expression, and facility in language. Health and physical development are provided for in the play periods, in snack and rest time, and in encouraging the practice of health habits in a hygenic environment. Music and literature provide aesthetic enjoyment, in addition to the other stated purposes.

The principles as identified by the authorities for planning the schedule are analyzed in Table V. The analysis indicated a wide variation among authorities. The principles for planning the schedule are synthesized in Table VI. The authorities agreed on the need for flexibility, for planning a rhythm of active and quiet periods, for

TABLE III

ANALYSIS OF PURPOSES OF EACH AREA OF THE CURRICULUM AS IDENTIFIED BY SELECTED AUTHORITIES*

Purposes	Foster Headley	Heffernan Todd	Leeper Others	Wills Lindberg
Work Period				
Social development	x	x	x	x
Planning, working, evaluating, cleaning up	x	x	x	x
Concept development			x	
Motor skill development	x		x	
Play and/or Physical Education				
Skill in use of equipment and in games	x	x		x
Experimentation	x			x
Physical fitness	x	x	x	x
Acceptable social relationships	x	x	x	
Orientation to world		x	x	
Language development	x	x	x	
Snack Time				
Nutrition	x	x	x	x
Conversation	x		x	x
Counting			x	
Manners			x	x
Eating different foods				x
Rest Time				
Relaxation	x	x	x	x
Looking at books			x	
Social Studies				
Deeper understanding of environment and world	x	x	x	x
Relating known to unknown	x			
Foster democratic way of life		x	x	x
Stimulate children to interact with environment		x		
Science				
Develop scientific attitude	x	x	x	x
Learn some subject matter	x	x	x	x

TABLE III (continued)

Purposes	Foster Headley	Heffernan Todd	Leeper Others	Wills Lindberg
Science (cont.)				
Develop interest and appreciation of science in environment	x		x	x
Develop skill of observation	x	x	x	x
Literature				
Appreciation of good literature	x	x	x	x
Use and handling of books	x			x
Foundation for reading	x	x	x	x
Gaining information	x			x
Art and Music				
Self-expression and creativity	x	x	x	x
Therapeutic values	x	x	x	
Social growth			x	
Intellectual growth	x	x	x	x
Motor coordination	x	x	x	
Skills in art and music	x	x	x	x
Aesthetic enjoyment	x	x		x
Language Arts and Mathematics				
Oral expression and vocabulary development	x	x	x	x
Appreciation of the significance of spoken and written words	x			
Concept development	x		x	
Foundation learning		x	x	x
Social tool		x	x	
Learn about the language			x	
Health and Safety				
Health habits	x	x	x	x
Physical welfare	x	x		
Hygenic school plant	x	x	x	x

*Headley, *op. cit.*, pp. 79, 90, 92, 130, 187, 214, 224, 260, 282, 307, 330, 342, 362-63, 379, 491-94; Heffernan, *op. cit.*, pp. 88-89, 91-100, 105, 110-12, 128-32, 54-55, 166, 188-200, 204-27, 230, 257, 279-80, 331; Leeper, *op. cit.*, pp. 146-47, 163-65, 192, 213-15, 238, 277-79, 296, 304-308, 312-13, 333, 338-39, 359-61; and Wills, *op. cit.*, pp. 90-94, 132, 149, 160-61, 188, 214, 268, 279.

TABLE IV

SYNTHESIS OF PURPOSES OF EACH AREA OF THE CURRICULUM AS IDENTIFIED BY SELECTED AUTHORITIES

- Work Period
  - Social development
  - Planning, working, evaluating, cleaning up
- Play and/or Physical Education
  - Skill in use of equipment and in games
  - Physical fitness
  - Language development
- Snack Time
  - Nutrition
  - Conversation
- Rest Time
  - Relaxation
- Social Studies
  - Deepen understanding of environment and world
  - Foster democratic way of life
- Science
  - Develop scientific attitude
  - Learn some subject matter
  - Develop interest and appreciation of science in environment
  - Develop skill of observation
- Literature
  - Appreciation of good literature
  - Foundation for reading
- Art and Music
  - Self-expression and creativity
  - Therapeutic values
  - Intellectual growth
  - Motor coordination
  - Skills in art and music
  - Aesthetic enjoyment
- Language Arts and Mathematics
  - Oral expression and vocabulary development
  - Foundation learning
- Health and Safety
  - Health habits
  - Hygenic school plant

TABLE V

ANALYSIS OF PRINCIPLES FOR THE PLANNING OF THE CURRICULUM AND SCHEDULE BY THE SELECTED AUTHORITIES*

Principles	Foster Headley	Heffernan Todd	Leeper Others	Wills Lindberg
Consider background and past experiences of children	x			
Consider training and personality of teacher	x			
Consider physical plant	x			
Consider location of school	x			
Allow for flexibility		x	x	x
Plan for rhythm of activity and rest	x	x	x	x
Have a wide choice for children's selection of materials		x		
Plan activities related to purposes for groups and individual children		x	x	x
Use blocks of time	x	x	x	x
Plan for short periods to maintain interest				x
Avoid vigorous activity immediately before and after snack time				x
Arrange sequence for easy transition				x
Plan routines to avoid waste of time, interest, and materials				x
Plan for supervision of children at all times				x

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*Headley, _op. cit._, pp. 153-56, 330; Heffernan, _op. cit._, pp. 330-36; Leeper, _op. cit._, pp. 119-20, 143; and Wills, _op. cit._, pp. 88, 103.

planning activities for specific purposes in meeting the needs of children, and for planning the activities in blocks of time in the daily program.

TABLE VI

SYNTHESIS OF PRINCIPLES FOR THE PLANNING OF THE CURRICULUM AND SCHEDULE BY THE SELECTED AUTHORITIES

1. Allow for flexibility
2. Plan for rhythm of activity and rest
3. Plan activities related to purposes for groups and individual children
4. Use blocks of time

The authorities discussed preschool sessions that vary from two to four hours, or that could extend to an all day session.[3] A three and one-half hour session was suggested most frequently. An analysis of a three and one-half hour session is shown in Table VII. Sequence, grouping of activities, and terminology varied but there was agreement on the over-all schedule. The daily schedule is synthesized in Table VIII. Work-time is scheduled for approximately one-fourth of the day. Work-time activities include dramatic play, construction, art, manipulative activities, looking at books, games, use of large muscle equipment, and clean-up activities.[4] Almost as much time is given to outdoor play. Approximately equal time is given

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[3] Headley, _op. cit._, p. 153; and Wills, _op. cit._, p. 96.

[4] Headley, _op. cit._, pp. 196-209; Heffernan, _op. cit._, p. 331; Leeper, _op. cit._, p. 140; and Wills, _op. cit._, p. 90.

TABLE VII

ANALYSIS OF REPRESENTATIVE DAILY SCHEDULES AND SUGGESTED TIME ALLOTMENTS FOR A THREE AND ONE-HALF HOUR SESSION AS IDENTIFIED BY THE SELECTED AUTHORITIES*

Foster-Headley Curriculum	Number of Minutes	Heffernan-Todd Curriculum	Number of Minutes	Leeper-others Curriculum	Number of Minutes	Wills-Lindberg Curriculum	Number of Minutes
Greetings Inspection Room interests	30	Arrival Inspection	30	Arrival	15	Opening	10
Social living	45	Work and play activities	55	Free-choice activities	60	Work-time	60
Toileting Snack time Rest time	45	Toileting Juice Rest	35	Clean-up Snack period Quiet time	20	Toileting Play Snack time Rest time	60
Active rhythms and music	30	Outdoor play	75	Outdoor play	60	Outdoor play	30
Various guided activities	30	Games Rhythmic activities Singing Stories Listening to records	30	Music Rhythms Story	30	Group experiences Talking Field trips and walks Music	30
Language arts	25						
				Evaluation and planning for next day	20	Storytime	25
Dismissal		Dismissal		Dismissal		Dismissal	

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*Headley, _op. cit._, pp. 153-54; Heffernan, _op. cit._, p. 331; Leeper, _op. cit._, pp. 140-41 and Wills, _op. cit._, p. 96.

to large group experiences; story and language arts; and toileting, snack, and rest time.

TABLE VIII

SYNTHESIS OF A REPRESENTATIVE DAILY SCHEDULE AND SUGGESTED TIME ALLOTMENTS FOR A THREE AND ONE-HALF HOUR SESSION AS IDENTIFIED BY THE SELECTED AUTHORITIES

Activity	Number of Minutes
Arrival	20
Work-time	50
Clean-up, toileting, snack time, rest time	35
Outdoor play	40
Group experiences (one activity at a time)	30
Story and language arts	30
Dismissal	

Influences on the Curriculum of the Preschool from the Selected Preschool Movements

The Froebel kindergarten. The Froebel curriculum consisted of gifts and occupations, Mother and Nursery Songs, games, nature study and religious training. Influences of the Froebel curriculum are evident. Some of the gifts and occupations influenced the art and construction activities of the work period. The play activities reflect the games in the Froebel curriculum. The Mother and Nursery Songs influenced the addition of music, literature and oral expression to the preschool curriculum. Science originated with the nature study of the Froebel curriculum. The general framework of the modern preschool curriculum was influenced by the Froebel movement.

Montessori movement. The Montessori curriculum consisted of three areas: motor education, education of the senses, and preparation for writing and arithmetic. The practical life exercises of motor education--the care and management of the environment and of personal care--did influence the modern preschool. The housekeeping responsibilities the children assume in the modern kindergarten as well as the health habits they practice, were influenced by the practical life exercises. The other two areas of the curriculum had some influence on the equipment found in the modern preschool.

The Montessori curriculum did not have a great influence on the modern American preschool curriculum.

The child study movement and the reconstructed kindergarten. Two principles of Table VI for planning the curriculum resulted from the child study movement. One was the principle of flexibility and the other was that of planning activities related to purposes for groups and individual children. The needs and interests of children were considered in the types of activities and materials which were supplied.

Of the activities in the daily schedule of the modern preschool (Table VIII), work-time, language arts, lunch, rest, and outdoor play were influenced by the child study movement. The emphasis on health led to lunch, rest and physical activity in the fresh air. Work-time resulted from the realization that children needed opportunities for a great variety of experiences that were selected and planned by the children in an informal social atmosphere, if they were to develop their capacities.

Most of the purposes of each area in the curriculum as stated in Table IV were influenced to some degree by the child study movement. The opportunity for social development and the planning, working, and cleaning up activities of the work period were important influences of this movement. The skill in use of equipment and in games and physical fitness resulted from the stress on health. The nutrition of snack time, the relaxation of rest time, the health habits and hygenic school plant, were likewise added because of concerns for the health of the children. The fostering of the democratic life was largely influenced by Dewey's philosophy. The purpose of developing self-expression in art and music received its impetus from the child study movement. This movement also influenced the appreciation of good literature and the oral expression of the language arts.

Thus, the child study movement had a strong influence on the purposes of the preschool curriculum.

Project Head Start. The guiding principles for developing the daily program for Project Head Start include all of the principles in Table VI. Adaptation of the curriculum to the needs of the child is stressed. Additional principles in the Head Start guidelines refer to methods and equipment which are included in the respective sections.

The purposes of the Head Start program are more comprehensive than the preschool today. The health program is more extensive in nutrition and in diagnoses of health problems. The services available to the family, and the kinds of involvement of parents and volunteers are in addition to the purposes of the preschool.

The educational program follows the schedule generally in Table VIII. Breakfast and lunch are additions. Group experiences are informal in nature. Greater emphasis is placed on language development than in the preschool.

Influences of Project Head Start on the preschool program are of a predictive nature. The Follow Through program will extend into the kindergarten. This program will stress small classes; experimental teaching methods; developing programs for parents; using older brothers and sisters, parents and neighbors in the classroom; and providing psychological, medical, and dental services.[5] The Follow Through program may influence the kindergarten program in the future. Shriver predicts that Project Head Start will influence the reduction of pupil-teacher ratio, increased use of teacher aides, a hot food program, participation by parents in actual school situations, and social services to poor families.[6]

Head Start may be influential in extending public education downward, in developing a more comprehensive program for the preschool and in adapting, to a greater degree, the curriculum to the special needs of children.

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[5] Mark R. Arnold, "Why 'Head Start,' Public Success, Sometimes Fails," National Observer, September 4, 1967, p. 14.

[6] R. Sargent Shriver, "After Head Start--What?" Childhood Education, 44:2, September, 1967.

III. MATERIALS OF THE PRESCHOOL

Criteria for the Materials of the Preschool

The analysis of the materials needed to achieve the goals of the preschool curriculum as identified by the selected authorities is given in Table IX, and the synthesis of this list is shown in Table X. The authorities are in agreement on the types of materials for each area of the curriculum, as well as on most of the specific items of equipment. Materials for construction, experimentation, self-expression, large muscle activity, and play are prominent types of equipment on the list.

Influences on the Materials of the Preschool from the Selected Preschool Movements

The Froebel kindergarten. Many of the Froebel gifts and occupations have been discarded. The balls and blocks of the gifts, as well as the drawing, painting, sewing, paper cutting and clay modeling of the occupations have been retained. The original stories for the gifts have been replaced by literature and poetry. The plants and animals seen in the modern preschool originated in the Froebel kindergarten. The materials have been redesigned and adapted to America. Better songs, games, stories, pictures, and play materials have been substituted for the ones Froebel used.

TABLE IX

ANALYSIS OF MATERIALS FOR A PRESCHOOL AS IDENTIFIED BY THE SELECTED AUTHORITIES*

Equipment	Foster Headley	Heffernan Todd	Leeper Others	Wills Lindberg
Indoor Play Equipment				
Blocks--hollow blocks	x		x	x
floor unit blocks	x	x	x	x
assorted boards, accessories	x	x	x	x
Transportation toys	x	x	x	x
People and animals	x	x		x
Climbing apparatus	x		x	
Puzzles of varying difficulty	x		x	x
Games	x		x	x
Assorted toys	x		x	x
Cooking equipment		x	x	x
Playhouse furniture, accessories	x	x	x	x
Dress-up clothes	x		x	x
Water play equipment		x	x	x
Construction and manipulative toys	x		x	x
Resting Equipment				
Resting mats for individuals	x	x	x	x
Equipment and Supplies for Art				
Painting materials--various kinds	x	x	x	x
Modeling materials	x	x	x	x
Drawing materials	x	x	x	x
Sewing supplies	x		x	x
Cutting and pasting materials	x	x	x	x
Large paper--various types	x	x	x	x
Printing materials	x	x		
Woodworking Equipment				
Workbench, tools, wood, accessories	x	x	x	x
Science Equipment				
Aquarium	x	x	x	x
Herbarium	x	x	x	x
Cages for pets	x	x	x	x

TABLE IX (continued)

Equipment	Foster Headley	Heffernan Todd	Leeper Others	Wills Lindberg
Science Equipment (cont.)				
Measuring equipment, various types	x	x	x	x
Materials for experimentation	x	x	x	x
Gardening equipment	x	x	x	x
Music Equipment				
Piano and autoharp	x		x	x
Melody bells	x	x	x	x
Rhythm instruments	x	x	x	x
Phonograph and recordings	x	x	x	x
Radio		x		x
Scarves				x
Outdoor Play Equipment				
Jungle gym	x	x	x	x
Climbers--different varieties	x	x	x	x
Sandbox and accessories	x	x	x	x
Swings	x	x	x	x
Slide	x	x	x	x
Platforms		x	x	x
Merry-go-round			x	x
Bridges			x	x
Mazes			x	
Gangplanks			x	
Pools			x	x
Jumping pit		x		
Trampolene with handles				x
Teeter totter	x	x	x	x
Walking or balancing boards	x	x	x	x
Sawhorses	x			
Balls and jump ropes	x	x	x	x
Wheel toys	x	x	x	x
Tools for gardening	x	x	x	x
Prereading and Number Equipment				
Games and manipulative materials	x		x	x
Measuring and weighing equipment			x	
Collections of articles for counting			x	
Clocks and watches	x		x	

TABLE IX (continued)

Equipment	Foster Headley	Heffernan Todd	Leeper Others	Wills Lindberg
Audiovisual Equipment				
United States flag	x	x	x	x
Films and filmstrips	x	x	x	x
Television	x	x	x	x
Pictures	x	x	x	x
Globes and maps	x		x	
Books and book storage	x	x	x	x
Puppets and costumes	x		x	x
Access to projectors, tape recorder	x	x	x	x
Stereoscope and reels	x			
Flannelboard and equipment	x			x
Housekeeping Equipment				
Equipment for child care of room	x		x	x
Storage				
Locker accessible to each child	x	x	x	x
Storage accessible to children	x	x	x	x
Storage accessible to adults	x	x	x	x
Furniture				
Tables and chairs--child-size, movable, cleanable	x	x	x	x

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*Headley, _op. cit._, pp. 95-119; Heffernan, _op. cit._, pp. 50-65, 120-121; Leeper, _op. cit._, pp. 181, 300, 317-30, 410-11; and Wills, _op. cit._, pp. 104, 111-20.

TABLE X

SYNTHESIS OF MATERIALS FOR A PRESCHOOL AS IDENTIFIED BY THE SELECTED AUTHORITIES

Equipment

Indoor Play Equipment
Blocks--hollow blocks
  floor unit blocks
  assorted boards, accessories
Transportation toys
People and animals
Puzzles of varying difficulty
Games
Assorted toys
Cooking equipment
Playhouse furniture, accessories
Dress-up clothes
Water play equipment
Construction and manipulative toys

Resting Equipment
Resting mats for individuals

Equipment and Supplies for Art
Painting materials--various kinds
Modeling materials
Drawing materials
Sewing supplies
Cutting and pasting materials
Large paper--various types

Woodworking Equipment
Workbench, tools, wood,
  accessories

Science Equipment
Aquarium
Herbarium
Cages for pets
Measuring equipment, various types
Materials for experimentation
Gardening equipment

Music Equipment
Piano and autoharp
Melody bells

Music Equipment (cont.)
Rhythm instruments
Phonograph and recordings

Outdoor Play Equipment
Jungle gym
Climbers--different varieties
Sandbox and accessories
Swings
Slide
Platforms
Teeter totter
Walking or balancing boards
Balls and jump ropes
Wheel toys
Tools for gardening

Prereading and Number Equipment
Games and manipulative materials

Audiovisual Equipment
United States flag
Films and filmstrips
Television
Pictures
Books and book storage
Puppets and costumes
Access to projectors, tape recorder

Housekeeping Equipment
Equipment for child care of room

Storage
Locker accessible to each child
Storage accessible to children
Storage accessible to adults

Furniture
Tables and chairs--child-size,
  movable, washable

Montessori movement. The environment Montessori designed to fit the child influenced the preschool. The child-size furniture and the child-size housekeeping equipment for taking care of the classroom were influenced by Montessori.

Some of the Montessori manipulative materials for education of the senses in the modern preschool have been adapted to the modern American preschool. The equipment for learning the skills of various types of fastening clothing originated with the Montessori dressing frames. The graduated tower and building sets were influenced by the Montessori sensorial materials; especially the tower and the prisms. Montessori influenced some of the ideas for pre-reading and mathematics manipulative equipment; such as, shape, size, and color discrimination manipulative equipment; form-boards; letters and numbers; and counting and matching manipulative equipment. The basic idea, that concrete materials could be designed for intellectual development, was influenced by Montessori.

The child study movement and the reconstructed kindergarten. The child study movement influenced the introduction of larger materials, a greater variety of materials, and materials for self-expression and construction.

The modern preschool still has the large blocks, large transportation toys and manipulative equipment. The large-sized paper and paint brushes as well as the large outdoor play equipment were influenced by the child study movement. The concern for physical development also motivated the addition of outdoor play equipment;

such as, slides, swings, walking boards, and teeter totters.

The variety of materials in the preschool today is evidence of the child study movement. Many different kinds of toys, books, the phonograph, and manipulative materials are representative of the increase in variety of materials.

Materials for self-expression and construction are provided for through playhouse and dramatic play materials, a variety of construction sets, woodworking equipment, and an increase in the use of art materials.

Project Head Start. The materials recommended for Project Head Start are similar to the equipment listed in Table X. Additions to the Head Start materials are in the areas of science and food service. Shriver predicts that Head Start will influence the kindergarten to use a greater variety of materials and electronic aids.[7]

IV. METHODS OF THE PRESCHOOL

Criteria for the Methods of the Preschool

The analysis of the methods in preschool as identified by the authorities is shown in Table XI, and the synthesis, in Table XII. The authorities agreed on the methods they recommend in developing the goals of the preschool. The common element in all the methods is involvement and activity of the children. They have the opportunity to reason, to experiment, and to verbalize.

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[7] William F. Brazziel, "Two Years of Head Start," Phi Delta Kappan, 48:346, March, 1967.

TABLE XI

ANALYSIS OF METHODS AS IDENTIFIED BY THE SELECTED AUTHORITIES*

Methods	Foster Headley	Heffernan Todd	Leeper Others	Wills Lindberg
Play	x	x	x	x
Problem-solving	x	x	x	x
Experimentation, investigation, observation	x	x	x	x
Experiences and learning by doing	x	x	x	x
Field trips	x	x	x	x
Planning, carrying out plans, evaluating	x	x	x	x
Self-expression and creativity	x	x	x	x
Discussion, talking, sharing	x	x	x	x
Individual and group activities	x	x	x	x
Construction	x	x	x	x
Games	x	x	x	x
Sensory experiences		x		

*Headley, op. cit., pp. 48, 67, 128-30, 187, 197, 210, 219, 307-27, 371-74, 425-26; Heffernan, op. cit., pp. 42-43, 114-15, 131, 149-61, 177-79, 198, 258-64, 330; Leeper, op. cit., pp. 135-45, 277-89, 313, 321, 336; and Wills, op. cit., pp. 26-42, 82, 132, 155-56, 166, 204, 214, 257-59, 268.

Emphasis on the use of specific methods varies with authorities. Self-expression and creativity were emphasized by three authorities.[8]

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[8] Headley, op. cit., pp. 129-30; Leeper, op. cit., pp. 135-36; and Wills, op. cit., pp. 203-212.

Headley also emphasized problem-solving[9] while Leeper emphasized planning, carrying out plans, and evaluating the results.[10] Wills and Lindberg also emphasized the importance of learning by doing.[11]

TABLE XII

SYNTHESIS OF METHODS AS IDENTIFIED BY THE SELECTED AUTHORITIES

Methods
Play
Problem-solving
Experimentation, investigation, observation
Experiences and learning by doing
Field trips
Planning, carrying out plans, evaluating
Self-expression and creativity
Discussion, talking, sharing
Individual and group activities
Construction
Games

Heffernan and Todd emphasized play, construction and sensory experiences.[12] Authorities agreed on beginning with the interests of children.[13] Typical of the kind of social climate that the authorities described for effective use of the methods in Table XII, is the statement "that to be free to learn, a child must feel physically comfortable in the setting and emotionally comfortable with his teacher and group."[14]

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[9] Headley, op. cit., p. 68.

[10] Leeper, loc. cit.

[11] Wills, op. cit., p. 28.

[12] Headley, op. cit., pp. 51, 153-61.

[13] Headley, op. cit., p. 48; Heffernan, op. cit., p. 42; Leeper, op. cit., p. 58; and Wills, loc. cit.

Influences on the Methods of the Preschool from the Selected Preschool Movements

The Froebel kindergarten. Froebel's self-activity through play kept all of the children involved in all areas of the curriculum. This self-activity is represented in the modern preschool through the methods of play, field trips, discussions, construction, games, and experiencing and learning by doing.

An increase in the types and variety of play and construction activities is evident in the lists of equipment. The group experiences of today, in which all of the children are engaged in similar activities, originated with Froebel.

Montessori movement. The main influence of the methods Montessori used was the individual activity of the child in which he selected his activity or piece of apparatus and moved at his own pace. However, the child in the Montessori school selected his equipment within a structured sequence and worked with it in a specified way while the preschool child selects his equipment from a great variety of materials, within a less structured program, and is permitted to experiment with the equipment in many ways.

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[14] Ibid., p. 29.

The child study movement and the reconstructed kindergarten. The child study movement had a strong influence on the methods used in the modern preschool as listed in Table XII. The child-initiated or self-directed activities influenced the methods of play, experimentation, experiencing and learning by doing, self-expression, and construction. The project method influenced the process of planning, carrying out plans, and evaluating the results. Discussion and talking have been given greater emphasis in the preschool program since the child study movement. The method of giving children an opportunity for individual as well as group activity was influenced by the developments of this movement.

Generally, preschool children have had more freedom to be active learners utilizing their interests as a result of the child study movement.

Project Head Start. Project Head Start recommends most of the methods in Table XII. Problem-solving and planning and carrying them out are not stressed in the literature. Emphasis is given to play, discussion, field trips, and working with individuals and small groups of children.

The methods used in Head Start may influence the preschool in that the teacher may work more with individual children and small groups and less with the entire group. The emphasis Head Start places on developing a healthy self-concept may influence the methods and the kind of guidance the preschool teacher employs.[15] Leeper states that research sponsored by the Office of Economic Opportunity and other agencies, should provide a wealth of information about how young children learn, particularly disadvantaged children, and give clues to the improvement of educational practices for all young children.[16]

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[15] Leeper, op. cit., p. 25.

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[16] *Ibid.*, p. 45.

CHAPTER VII

SUMMARY AND CONCLUSIONS

In this chapter, the procedures and analysis used in the study are outlined in the summary and the influences of each selected preschool movement on the preschool are stated in the conclusions.

Summary of the Study

The purpose of this study was to analyze the four selected preschool movements to identify the major influences that each selected preschool movement had on American preschool education. Each selected preschool movement was described according to the following outline: the history, the aim, the curriculum, the materials and the methods. Criteria for the aim, curriculum, materials, and methods of the preschool today were identified by analyzing and then synthesizing four authoritative sources in preschool education. The criteria of each area of the outline were compared to the description of each area of each selected preschool movement to identify the influences of the aim, the curriculum, the materials, and the method of each preschool movement. The description of each selected preschool movement is summarized in Table XIII.

Conclusions

The following conclusions regarding the influences of each selected preschool movement on the American preschool seem to be supported by the study. The conclusions are summarized in Table XIV.

TABLE XIII

SUMMARY OF THE DESCRIPTION OF THE SELECTED PRESCHOOL MOVEMENTS

	Froebel Kindergarten	Montessori Movement	Child Study Movement	Project Head Start
History				
Beginning of movement	1837 Germany 1855 America	1907 Italy 1911 America	1880 G. Stanley Hall's study	1965 Economic Opportunity Act
Description of the Preschool Movement				
Aim	Make needs and demands of child correspond to present stage of development	Set free child's personality--self-mastery, sense of responsibility	Develop physical powers, reasoning capacity, interests, social tendencies	Break cycle of poverty during child's formative years; health, emotional, social and mental development
Curriculum	Gifts and occupations, Mother and Nursery Songs, games, nature study, religion	Motor education, education of the senses, preparation for writing and arithmetic	Work period, conversation, lunch, rest, outdoor play, rhythms, songs, stories	Health, social services, parent involvement, volunteers, education
Materials	Gifts and occupations, book--Mother and Nursery Songs, plants, animals, gardens	Didactic apparatus	Large blocks, toys, outdoor play apparatus; construction and manipulative materials, books, variety of materials	Similar to preschool, more emphasis on science, food, audio-visual materials
Methods	Self-activity through play	Individual activity and progress	Child-initiated activity, project method, self-expression and experimentation	Play activity, adults respond to child's interests, individual and small group guidance

TABLE XIV

SUMMARY OF THE INFLUENCES OF THE SELECTED PRESCHOOL MOVEMENTS ON CONTEMPORARY PRESCHOOL PRACTICES

Influences on Preschool Practices	Froebel Kindergarten	Montessori Movement	Child Study Movement
Aim	Education as a process of growth and development	Sense of responsibility	Meet developmental needs of children, social responsibility, provide for health and physical development, build foundation for years ahead
Curriculum	Art, music, stories, science, play	Housekeeping responsibility, personal care	Work-time, language arts, lunch, rest, outdoor play
Materials	Adapted gifts and occupations, games, stories, play materials	Child-size environment and equipment, manipulative equipment	Larger materials, greater variety, materials for self-expression and experimentation
Methods	Play	Individual activity	Individual and group child-initiated activity, experimentation, self-expression, planning and executing plans
SUMMARY OF INFLUENCE ON PRESCHOOL EDUCATION	Education as process of growth, self-activity through play	Responsibility for care of self and environment	Meet developmental needs of children--physical, social, and mental needs

1. The Froebel kindergarten influenced the establishment of kindergartens in America. The most important influences of the Froebel kindergarten were the aim of adapting the experiences to the developmental needs of the children and the method of self-activity through play. The Froebel kindergarten also influenced the general framework of the kindergarten curriculum and some of the basic materials in the kindergarten. The Froebel materials which have been retained have been adapted, redesigned, and improved in quality.

2. The main influence of the Montessori movement was the responsibility given to preschool children for care of the environment with child-size equipment and for personal care. Montessori also had some influence on the child-size furniture in the preschool room, on the kinds of manipulative materials for education of the senses and of the intellect, and on the individual activity of the child.

3. The child study movement had considerable influence on the preschool of today. The reconstructed kindergarten which was a result of the child study movement influenced increased attention to health and physical development; adding lunch, rest, and outdoor play to the curriculum. The development of social responsibility became an important aim. This was provided for by giving children freedom to be active learners in pursuing their interests in an informal social atmosphere during the play and work-time periods. The child study movement also influenced the development of the

skill of learning to think, through the processes of planning and carrying out of these plans, and of experimenting and constructing with various materials. The materials were made larger, a greater variety of materials was provided, and more materials for self-expression and construction were added. These factors, in addition to more flexibility in the program, influenced the increased emphasis on meeting the developmental needs of children.

4. The influence of Project Head Start can only be predicted at this time. It may be that Head Start will influence the broadening of the aims of the preschool and the development of a more comprehensive program. Factors which may influence the broadening of the program may be the availability of social services to families; the involvement of parents and volunteers in the preschool program; and the strong emphasis on health services--nutrition, medical, dental, and psychological services. Head Start may influence more work with individuals and small groups of children. The effort of Head Start to adapt the program to the needs of a specific group of children, may also influence improved techniques for meeting the needs of all preschool children.

BIBLIOGRAPHY

GENERAL BIBLIOGRAPHY

Harris, Chester W. (ed.). Encyclopedia of Educational Research. The American Educational Research Association, National Education Association. New York: The Macmillan Company, 1960.

Headley, Neith E. Education in the Kindergarten. New York: American Book Company, 1966.

__________. The Kindergarten: Its Place in the Program of Education. New York: The Center for Applied Research in Education, Inc., 1965.

Heffernan, Helen and V. E. Todd. The Kindergarten Teacher. Boston: D.C. Heath and Company, 1960.

Leeper, Sarah Hammond and others. Good Schools for Young Children. New York: The Macmillan Company, 1968.

Monroe, Walter S. (ed.). Encyclopedia of Educational Research. The American Educational Research Association, National Education Association. New York: The Macmillan Company, 1950.

Wills, Clarice and L. Lindberg. Kindergarten for Today's Children. Chicago: Follett Publishing Company, 1967.

BIBLIOGRAPHY OF THE FROEBEL KINDERGARTEN

A. BOOKS

Barnard, Henry (ed.). Kindergarten and Child Culture Papers. Hartford: Office of Barnard's American Journal of Education, 1890.

Baylor, Ruth M. Elizabeth Palmer Peabody. Philadelphia: University of Pennsylvania Press, 1965.

Blow, Susan E. Symbolic Education. New York: D. Appleton and Company, 1894.

Bowen, H. Courthope. Froebel and Education Through Self-Activity. New York: Charles Scribner's Sons, 1892.

Dwight, Fannie E. and Josephine Jarvis (trans.). Friedrich Froebel: Mother Play and Nursery Songs. Boston: Lee and Shepard Publishers, 1878.

Eby, Frederick and Charles F. Arrowood. The Development of Modern Education. New York: Prentice-Hall, Inc., 1934.

Eliot, Henrietta R. and Susan E. Blow. The Mottoes and Commentaries of Friedrich Froebel's Mother Play. New York: D. Appleton and Company, 1895.

Fletcher, S. S. F. and J. Welton. Froebel's Chief Writings on Education. London: Edward Arnold and Company, ca. 1912.

Guggenheim, Aimee'. Froebel and the Kindergarten. New York: State Library Bulletin, 1901.

Hailmann, W. N. (trans.). Friedrich Froebel: The Education of Man. New York: D. Appleton and Company, 1887.

Heinemann, Arnold H. (ed.). Froebel Letters. Boston: Lee and Shepard Publishers, 1893.

Herford, William H. The Student's Froebel. Boston: D. C. Heath and Company, 1896.

Hoffmann, Heinrich. Kindergarten Toys and How to Use Them. New York: E. Steiger, 1874.

Jarvis, Josephine (trans.). Friedrich Froebel's Pedagogics of the Kindergarten. New York: D. Appleton and Company, 1895.

Kilpatrick, William H. Froebel's Kindergarten System Critically Examined. New York: Macmillan, 1916.

Lawrence, Evelyn (ed.). Friedrich Froebel and English Education. London: University of London Press Limited, 1952.

Lilley, Irene M. Friedrich Froebel. A Selection from his Writings. Cambridge: Cambridge University Press, 1967.

Michaelis, Emilie and H. K. Moore (trans.). Autobiography of Friedrich Froebel. London: Swan Sonnenschein and Company, 1891.

Parker, Samuel C. A Textbook in the History of Modern Elementary Education. Boston: Ginn and Company, 1912.

Quick, Robert H. Essays on Educational Reformers. New York: D. Appleton and Company, 1890.

Snider, Denton J. The Life of Frederick Froebel. Chicago: Sigma Publishing Company, 1900.

Vandewalker, Nina C. The Kindergarten in American Education. New York: The Macmillan Company, 1908.

White, Jessie. The Educational Ideas of Froebel. London: University Tutorial Press Limited, 1905.

Wiggin, Kate Douglas and N. A. Smith. Kindergarten Principles and Practices. Boston: Houghton, Mifflin and Company, 1896.

B. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS

Bicknell, T. "Report of the Committee on the Kindergarten," The Journal of Proceedings and Addresses, pp. 86-88. Washington, D.C.: National Education Association, 1884.

Blow, Susan. "Kindergarten Education," Education in the United States, pp. 1-40. One of a Series of Monographs Prepared for the United States Exhibit at the Paris Exhibition, 1900.

Hailmann, W. N. "Adaptation of Froebel's System of Education to American Institutions," Report of the Commissioner of Education, pp. 141-48. Washington, D.C.: United States Office of Education, 1872.

__________. "The Froebel Institute of North America," _The Journal of Proceedings and Addresses_, pp. 74-76. Washington, D.C.: National Education Association, 1884.

Hill, Patty Smith. _Kindergarten_. Reprint from the American Educator Encyclopedia, 1942. Washington, D.C.: Association for Childhood Education International, 1967.

National Education Association. "Department of Kindergarten Education," _Journal of Proceedings and Addresses_, pp. 589-619. Washington, D.C.: National Education Association, 1898.

National Education Association. "Department of Kindergarten Instruction," _The Journal of the Proceedings and Addresses_, pp. 349-68. National Education Association, 1885.

National Education Association. "Elementary and Kindergarten Departments," _Journal of Proceedings and Addresses_, pp. 50[illegible]-559. National Education Association, 1886.

United States Office of Education. "Kindergarten Culture," _Report of the Commissioner of Education_, pp. 354-59. Washington, D.C.: Government Printing Office, 1870.

United States Office of Education. "The Objects of the Kindergarten," _Report of the Commissioner of Education_, pp. 529-35. Washington, D.C.: Government Printing Office, 1871.

C. PERIODICALS

Butterworth, Hezekiah. "Sarah B. Cooper and the Church Kindergarten," _Kindergarten Magazine_, 9:415-19, February, 1897.

Davis, Mary Dabney. "A Century of the Kindergarten," _School Life_, 22:67-68, November, 1936.

Fenner, Mildred S. and E. Fishburn. "Elizabeth Peabody and the Kindergarten," _The Journal of the National Education Association_, 30:275-76, December, 1941.

Fisher, Veyra J. "The Nursery School and Its Beginnings," _Childhood Education_, 40:199-202, December, 1963.

Headley, Neith. "The Kindergarten Comes of Age," _NEA Journal_, 43:153-54, March, 1954.

Hofer, Amalie. "Nature Study Inevitable," _Kindergarten Magazine_, 8:137-43, October, 1895.

__________. "The Social Settlement and the Kindergarten," *Kindergarten Magazine*, 8:47-59, September, 1895.

Hughes, James L. and Col. F. Parker. "Comparison of the Educational Theories of Froebel and Herbart," *Kindergarten Magazine*, 8:10-14, September, 1895.

LeBeuf, Helen J. "Homely But Happy Kindergarten Ways," *Kindergarten Magazine*, 9:100-107, October, 1896.

Mabie, Hamilton W. "The Free Kindergarten," *Harper's Monthly Magazine*, 111:649-57, October, 1905.

MacKintosh, May. "The Evolution of the Kindergarten," *Education*, 10:151-58, November, 1889.

MacVannel, John A. "The Philosophy of Froebel," *Teachers College Record*, 4:3-44, November, 1903.

Palmer, Luella. "Montessori and Froebelian Materials and Methods," *The Elementary School Teacher*, 13:66-79, October, 1912.

Peabody, Elizabeth P. "Individuality in Its Relation to the Personality of Man, According to Froebel," *Education*, 11:616-18, July, 1881.

__________. "The Origin and Growth of the Kindergarten," *Education*, 2:507-27, May, 1882.

Russell, James E. "Kindergarten Education," *Teachers College Record*, 5:1-94, November, 1904.

Shirreff, E. "Educational Principles of the Kindergarten," *Education*, 1:425-32, May, 1881.

Shute, Mary C. "One Hundred Years of the Kindergarten," *The Journal of the National Education Association*, 26:40-41, February, 1937.

Von Bülow, Bertha. "The Message of Baroness von Marenholtz-Bülow to the American Kindergartners," *Kindergarten Magazine*, 9:745-57, June, 1897.

BIBLIOGRAPHY OF THE MONTESSORI MOVEMENT

A. BOOKS

Baroni, C. and G. Marangon. Materials for Montessori Schools. Gonzaga (Mantova), Italy: August, 1965.

Boyd, William. From Locke to Montessori. New York: Henry Holt and Company, 1914.

Cole, Luella. A History of Education: Socrates to Montessori. New York: Holt, Rinehart, and Winston, 1950.

Fisher, Dorothy C. The Montessori Manual. Chicago: The W. E. Richardson Company, 1913.

__________. A Montessori Mother. New York: Henry Holt and Company, 1912.

Montessori, Maria. Dr. Montessori's Own Handbook. Introduction by Nancy M. Rambusch. First published in 1914. New York: Schocken Books, 1965.

__________. The Montessori Method. Introduction by J. McV. Hunt. Translated from the Italian by Anne E. George in 1912. New York: Schocken Books, 1964.

__________. The Secret of Childhood. Translated by J. J. Costelloe, S. J. Notre Dame, Indiana: Fides Publishers, Inc., 1966.

__________. Spontaneous Activity in Education. Introduction by John J. McDermott. Translated from the Italian by F. S. Simmonds in 1917. New York: Schocken Books, 1965.

Orem, R. Calvert (ed.). Montessori for the Disadvantaged. New York: G. P. Putnam's Sons, 1967.

__________. A Montessori Handbook. New York: G. P. Putnam's Sons, 1965.

Rambusch, Nancy McCormick. Learning How to Learn. Baltimore: Helicon, 1962.

Standing, E. M. Maria Montessori--Her Life and Work. Fresno, California: Academy Library Guild, 1959.

__________. The Montessori Revolution in Education. New York: Schocken Books, 1962.

Stevens, Ellen Y. *A Guide to the Montessori Method.* New York: Frederick A. Stokes Company, 1913.

Ward, Florence E. *The Montessori Method and the American School.* New York: The Macmillan Company, 1913.

B. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS

Byoir, Carl. "The Presentation of Montessori Material," *Journal of Proceedings and Addresses*, pp. 613-21. Washington, D.C.: National Education Association, 1912.

Drummond, Margaret. "The Montessori Method as a Basis of Modern Education," *Report of the 23rd Annual Conference of Educational Associations*, pp. 21-25, December, 1934.

Gilbert, Sir John and C. A. Claremont. "Recent Developments in the Montessori System," *Report of the 19th Annual Conference of the Educational Associations*, pp. 98-105, January, 1931.

Harrison, Elizabeth. "The Montessori Method and the Kindergarten," *United States Bureau of Education*, Bulletin No. 28, pp. 5-34. Washington, D.C.: Government Printing Office, 1914.

Hill, Patty S. *Kindergarten.* Reprint from the American Educator Encyclopedia, 1942. Washington, D.C.: Association for Childhood Education International, 1967.

Montessori, Maria. "The Child's Place in Society," *Report of the 24th Annual Conference of Educational Associations*, pp. 41-44, December, 1935.

__________. "Education in Relation to the Imagination of the Little Child," *Journal of Proceedings and Addresses of the 53rd Annual Meeting and International Congress on Education*, pp. 661-67. Washington, D.C.: National Education Association, 1915.

__________. "The Mother and the Child," *Journal of Proceedings and Addresses of the 53rd Annual Meeting and International Congress on Education*, pp. 1121-30. Washington, D.C.: National Education Association, 1915.

__________. "My System of Education," *Journal of Proceedings and Addresses of the 53rd Annual Meeting and International Congress on Education*, pp. 64-73. Washington, D.C.: National Education Association, 1915.

__________. "The Organization of Intellectual Work in School," Journal of Proceedings and Addresses of the 53rd Annual Meeting and International Congress on Education, pp. 717-22. Washington, D.C.: National Education Association, 1915.

__________. "The Social Question of the Child," Report of the 20th Annual Conference of Educational Associations, pp. 298-304, January, 1932.

__________. "The Spiritual Regeneration of Man," Report of the 22nd Annual Conference of Educational Associations, pp. 171-76, January, 1934.

Montessori, Maria and Claude A. Claremont. "Montessori and the Deeper Freedom," Education and Philosophy, G. Z. Bereday and J. A. Lauwerys, editors. Pp. 414-26. The Yearbook of Education. New York: World Book Company, 1957.

Newsome, Monsignor. "The Montessori Method and the Subnormal Mind," Report of the 18th Annual Conference of Educational Associations, pp. 23-27, January, 1930.

Perryman, Lucile (chm.). Montessori in Perspective. Washington, D.C.: National Association for the Education of Young Children, 1966.

Rambusch, Nancy McCormick. "At a Hot Age Should Systematic Reading Instruction Begin," Reading as an Intellectual Activity, J. Allen Figurel, editor. Pp. 222-24. International Reading Association Conference Proceedings. New York: Scholastic Magazines, 1963.

Shaw, Elizabeth R. "The Effect of the Scientific Spirit in Education Upon the Kindergarten in Relation to the Distinctive Characteristics of the Montessori Method," Journal of Proceedings and Addresses, pp. 439-45. Washington, D.C.: National Education Association, 1913.

Smith, Anna T. "The Montessori System of Education," United States Bureau of Education, Bulletin No. 17, pp. 5-30. Washington, D.C.: Government Printing Office, 1912.

Van Der Leeuw, J.J. "The Unique Character of the Montessori Method," Report of the 21st Annual Conference of Educational Associations, pp. 303-307, January, 1933.

Ward, Florence E. "The Montessori Method," Journal of Proceedings and Addresses, pp. 609-13. Washington, D.C.: National Education Association, 1912.

C. PERIODICALS

Alban, Sister M. "The Montessori Method--Applied!" Catholic School Journal, 61:23-26, December, 1961.

Banta, Thomas J. "Educating Children for Adulthood," Young Children, 21:272-80, May, 1966.

__________. "Montessori Research Project," Children's House, 1:24-25, September/October, 1966.

Barnett, Elise B. "The Montessori Approach to Music," The Piano Quarterly, pp. 10-19, Winter, 1966-67.

Besch, Grace and L. G. Hilliard. "Montessori: Mania or Mainstay?" Instructor, 76:16-17, 112, December, 1966.

Beyer, Evelyn. "Montessori in the Space Age?" NEA Journal, 52: 35-36, December, 1963.

"British Montessori Centers," School and Society, 13:166-67, February 5, 1921.

Claremont, Claude A. "Montessorian Apparatus," The Times Educational Supplement, 2000:750, August 28, 1953.

Denny, Terry. "Montessori Resurrected: Now What?" Educational Forum, 29:436-41, May, 1965.

__________. "Once Upon a Montessori," Educational Forum, 30:513-16, May, 1966.

"Dr. Montessori Dies," The American School Board Journal, 124:66, June, 1952.

Gardner, Riley W. "A Psychologist Looks at Montessori," The Elementary School Journal, 67:72-83, November, 1966.

George, Anne E. "The First Montessori School in America," McClure's Magazine, 39:177-87, June, 1912.

Gonzaga, Sister M. "Maria Montessori: Her Discoveries and Influence," Catholic School Journal, 64:33-37, October, 1964.

Hanson, Earl H. "What's a Cult?" Education, 87:381, February, 1967.

Hardy, Mattie C. "The Derivation of the Montessori Didactic Apparatus," Elementary School Journal, 18:294-300, December, 1917.

Hill, Patty S. Reviews: "The Advanced Montessori Method, Volumes I and II," Educational Review, 56:432-38, December, 1918.

Holmes, W. H. "The Montessori Methods," Education, 33:1-10, September, 1912.

Hymes, James L. "Montessori," Educational Leadership, 23:127-31, November, 1965.

"Information About the Montessori Method," McClure's Magazine, 37: 702-704, October, 1911.

"International Montessori Training Course," School and Society, 2:59-60, July 10, 1915.

Krippner, Stanley. "Evaluating Pre-Readiness Approaches to Reading," Education, 87:12-20, September, 1966.

__________. "Materials and Methods in Reading," Education, 85:468, April, 1965.

Light, Mildred. "Montessori for Today," Education, 87:484-87, April, 1967.

"Madame Montessori and American Imitators," Elementary School Journal, 30:570-71, April, 1930.

"Maria Montessori," School and Society, 75:318, May 17, 1952.

Martin, John H. "Montessori after 50 Years," Teachers College Record, 66:552-54, March, 1965.

Miller, Bruce, Jr. "Montessori: The Model for Pre-School Education?" Grade Teacher, 82:36-39, 112-13, March, 1965.

Mills, William H. and G. L. McDaniels. "Montessori Yesterday and Today," Young Children, 21:137-41, January, 1966.

Montessori, Maria. "Disciplining Children," McClure's Magazine, 39:95-102, May, 1912.

__________. "The Education of Defective Children," The Saturday Review, 153:7, January 2, 1932.

__________. "An Environment for the Child," The Saturday Review, 152:783-84, December 19, 1931.

__________. "Ideals and Facts in Education," The Saturday Review, 152:711-12, December 5, 1931.

__________. "The New Method in Education," *The Saturday Review*, 153:64, January 16, 1932.

Montessori, Mario. "Freedom and Its Meaning," *The American Teacher*, 33:14-16, March, 1949.

"Montessori Now," *The Times Educational Supplement*, 2239:607, April 18, 1958.

"The Montessori Training Course in Rome," *McClure's Magazine*, 40: 224-26, March, 1913.

"Mount Vernon, New York, Mixes Mothers and Montessori," *Nation's Schools*, 77:60-61, June, 1966.

O'Shea, M. V. "The Montessori Method of Teaching," *The Dial*, 52: 392-94, May 16, 1912.

Palmer, Luella. "Montessori and Froebelian Materials and Methods," *The Elementary School Teacher*, 13:66-79, October, 1912.

Pitcher, Evelyn G. "An Evaluation of the Montessori Method in Schools for Young Children," *Childhood Education*, 42:489-92, April, 1966.

Plant, Emma N. "Reflections on the Revival of the Montessori Method," *The Journal of Nursery Education*, 17:131-36, March, 1962.

Prater, Norma J. and G. E. Mason. "Early Reading and Reading Instruction," *Elementary English*, 43:483-88, May, 1966.

Sayre, Harriet. "The Artistic Value of the Montessori Geometrical Insets," *The Psychological Review*, 8:6-11, March 15, 1914.

Schechter, Marshall D. "Montessori and the Child's Natural Development," *Children's House*, 1:13-16, September/October, 1966.

Schill, Britta and Eveline Omwake. "The Montessori System," *Childhood Education*, 39:171-75, December, 1962.

Spodek, Bernard. "Montessori Education Visited," *Elementary English*, 42:75-79, January, 1965.

Standing, Mortimer. "The Montessori Method," *The Catholic Educational Review*, 29:412-24, September, 1931.

Stendler, Celia. "The Montessori Method," *Educational Forum*, 29: 431-35, May, 1965.

Stevens, Ellen Y. "The Montessori Method and the American Kindergarten," McClure's Magazine, 40:77-82, November, 1912.

__________. "The Montessori Movement," McClure's Magazine, 41:182-86, May, 1913.

__________. "The Montessori Movement in America," McClure's Magazine, 40:222-27, February, 1913.

Tozier, Josephine. "An Educational Wonder-Worker--The Methods of Maria Montessori," McClure's Magazine, 37:3-19, May, 1911.

__________. "The Montessori Apparatus," McClure's Magazine, 38:289-302, January, 1912.

__________. "The Montessori Schools in Rome," McClure's Magazine, 38:122-37, December, 1911.

Wakin, Edward. "The Return of Montessori," Saturday Review, 47:61-63, November 21, 1964.

Walker, Jane. "The Montessori Method of Education," Educational Review, 46:300-307, October, 1913.

Warren, Howard C. "The 'House of Childhood': A New Primary System," The Journal of Educational Psychology, 3:121-32, March, 1912.

Witmer, Lightner. "The Montessori Method," The Psychological Clinic, 8:1-5, March 15, 1914.

"A Woman Pioneer in Education," Scientific American, 106:470, May 25, 1912.

D. UNPUBLISHED MATERIALS

American Montessori Society. Montessori Oriented Materials. October, 1967. (Mimeographed.)

Fleege, Urban H. "The Promise of Montessori." Reprint from Extension, June, 1965.

Morra, Mike. "The Montessori Method in the Light of Contemporary Views of Learning and Motivation." January, 1967. (Mimeographed.)

Shaw, Russell. "Montessori on Montessori." November, 1966. (Mimeographed.)

BIBLIOGRAPHY OF THE CHILD STUDY MOVEMENT

A. BOOKS

Beck, Robert H. "Traditional, Progressive, and Modern Education," *The Three R's Plus*, Robert H. Beck, editor. Minneapolis: University of Minnesota Press, 1956. Pp. 3-11.

Burke, Agnes and others (comp.). *A Conduct Curriculum for the Kindergarten and First Grade*. Introduction by Patty S. Hill. New York: Charles Scribner's Sons, 1923.

Cremin, Lawrence A. "John Dewey and the Progressive-Education Movement," *Dewey on Education*, Reginald D. Archambault, editor. New York: Random House, 1966. Pp. 9-24.

Dewey, John. *The Child and the Curriculum. The School and Society.* Introduction by L. Carmichael. First published in 1902. Chicago: The University of Chicago Press, 1962.

__________. *Experience and Education*. New York: Collier Books, 1938.

__________. *My Pedagogic Creed*. First published in 1897. Washington, D.C.: The Progressive Education Association, 1929.

Dewey, John and E. Dewey. *Schools of To-Morrow*. New York: E. P. Dutton and Company, 1915.

Dworkin, Martin S. "John Dewey: A Centennial Review," *Dewey on Education*, M. S. Dworkin (Introduction and Notes), Classics in Education No. 3. New York: Bureau of Publications, Teachers College, Columbia University, 1959. Pp. 1-18.

Eby, Frederick and Charles F. Arrowood. *The Development of Modern Education*. New York: Prentice-Hall, Inc., 1934.

Forest, Ilse. *The School for the Child from Two to Eight*. Boston: Ginn and Company, 1935.

Gesell, Arnold. *The Mental Growth of the Pre-School Child*. New York: The Macmillan Company, 1925.

__________. *The Pre-School Child*. Boston: Houghton Mifflin Company, 1923.

Gesell, Arnold and B. C. Gesell. "The Scientific Study of the Child," *The Normal Child and Primary Education*. Boston: Ginn and Company, 1912. Pp. 17-28.

Hall, G. Stanley. Educational Problems. Volume I. New York: D. Appleton and Company, 1911.

Harrison, Elizabeth. A Study of Child-Nature from the Kindergarten Standpoint. Chicago: The Chicago Kindergarten College, 1895.

Hill, Patty S. Kindergarten. Reprint from the American Educator Encyclopedia, 1942. Washington, D.C.: Association for Childhood Education International, 1967.

Hurlock, Elizabeth B. "The History of Child Psychology," Child Development. New York: McGraw-Hill Book Company, 1950. Pp. 1-22.

International Kindergarten Union. Committee of Nineteen. Pioneers of the Kindergarten in America. New York: The Century Company, 1924.

Kilpatrick, William H. The Project Method. New York: Teachers College, Columbia University, 1918.

Mayer, Frederick. The Great Teachers. New York: The Citadel Press, 1967.

Meyer, Adolph E. The Development of Education in the Twentieth Century. New York: Prentice-Hall, Inc., 1949.

Parker, Samuel C. A Textbook in the History of Modern Elementary Education. Boston: Ginn and Company, 1912.

Parker, Samuel C. and Alice Temple. Unified Kindergarten and First-grade Teaching. Boston: Ginn and Company, 1925.

Pratt, Caroline (ed.). Experimental Practice in the City and Country School. New York: E. P. Dutton and Company, 1924.

__________. I Learn From Children. New York: Simon and Schuster, 1948.

Prescott, Daniel A. The Impact of Child Study on Education. The P. O. Wagner Memorial Lecture. Columbus, Ohio: Division of Special Education, Ohio Department of Education, 1962.

Templin, Mildred C. and R. H. Beck. "Some Contributions of Child Study to Modern Education," The Three R's Plus, Robert H. Beck, editor. Minneapolis: University of Minnesota Press, 1956. Pp. 12-20.

B. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS

Abbot, Julia W. *The Child and the Kindergarten.* Bureau of Education Kindergarten Circular No. 8. Washington, D.C.: Department of the Interior, February, 1920.

————. *Kindergartens Past and Present.* Bureau of Education Kindergarten Circular No. 11. Washington, D.C.: Department of the Interior, 1923.

Alder, Louise M. "The Effect of the Scientific Spirit in Education Upon the Kindergarten in Relation to Materials," *Journal of Proceedings and Addresses*, pp. 435-39. Washington, D.C.: National Education Association, 1913.

————. "How the Needs of the Kindergarten Period Are Being Met," *Addresses and Proceedings*, pp. 716-17. Washington, D.C.: National Education Association, 1923.

Barbour, Marion B. "The Influences of Modern Education Upon Handwork for Children," *Journal of Proceedings and Addresses*, pp. 647-53. Washington, D.C.: National Education Association, 1915.

Barnes, Earl. "Fundamental Factors in the Making of a Kindergarten Curriculum," *Journal of Proceedings and Addresses*, pp. 502-507. Washington, D.C.: National Education Association, 1908.

Barus, Annie H. (chm.). "Report of the Committee on the Study of Child Development," *Journal of Proceedings and Addresses*, pp. 996-1023. St. Paul, Minnesota: National Education Association, 1894.

Bryan, William L. "Child Study--Systematic and Unsystematic," *Journal of Proceedings and Addresses*, pp. 412-18. St. Paul, Minnesota: National Education Association, 1895.

Bryan, William L. (pres.). "Department of Child Study," *Journal of Proceedings and Addresses*, pp. 893-943. St. Paul, Minnesota: National Education Association, 1895.

Burk, Frederic L. "The Kindergarten Child Physically--A Curriculum of Applied Child Study for the Kindergarten and Primary School," *Journal of Proceedings and Addresses*, pp. 570-74, 1051-1057. Published by the National Education Association, 1899.

Burnham, William H. "The Scientific Study of Children," *Journal of Proceedings and Addresses*, pp. 908-13. Washington, D.C.: National Education Association, 1908.

Davis, Mary D. *General Practice in Kindergarten Education in the United States*. Research Committee of the Department of Kindergarten Education. Washington, D.C.: National Education Association, 1925.

__________. *A Primer of Information About Kindergarten Education*. Bureau of Education City School Leaflet No. 30. Washington, D.C.: Department of the Interior, August, 1928.

Department of Kindergarten-Primary Education. *Early Education*. Washington, D.C.: National Education Association, 1956.

Dickson, Virgil E. "Mental Testing for All Kindergarten Children," *Addresses and Proceedings*, pp. 196-98. Washington, D.C.: National Education Association, 1920.

Dobbs, Ella V. "Methods and Equipment," *Addresses and Proceedings*, pp. 465-67. Washington, D.C.: National Education Association, 1921.

Ezekiels, Jeannette. "The Kindergarten Makes Adequate Provision for the Children's Physical Development," *Addresses and Proceedings*, pp. 193-96. Washington, D.C.: National Education Association, 1920.

Gesell, Arnold and Julia W. Abbot. *The Kindergarten and Health*. Bureau of Education, Health Education No. 14. Washington, D.C.: Department of the Interior, 1923.

Greene, Marian P. "Literature for the Kindergarten Child," *Journal of Proceedings and Addresses*, pp. 303-306. Washington, D.C.: National Education Association, 1916.

Groszmann, Maximilian. "Danger-Signals in Young Children," *Journal of Proceedings and Addresses*, pp. 874-80. Washington, D.C.: National Education Association, 1910.

Hall, G. Stanley. "Child Study," *Journal of Proceedings and Addresses*, pp. 173-79. St. Paul, Minnesota: National Education Association, 1894.

__________. "A General Survey of Child Study," *Addresses and Proceedings*, pp. 332-35. Washington, D.C.: National Education Association, 1918.

__________. "Recent Advances in Child Study," *Journal of Proceedings and Addresses*, pp. 948-52. Washington, D.C.: National Education Association, 1908.

__________. "Some of the Methods and Results of Child Study Work at Clark University," *Journal of Addresses and Proceedings*, pp. 860-64. Washington, D.C.: National Education Association, 1896.

__________. "Unsolved Problems of Child Study and the Method of Their Attack," *Journal of Proceedings and Addresses*, pp. 782-87. Washington, D.C.: National Education Association, 1904.

Hall, G. Stanley and W. H. Burnham. "Child Study as the Basis for Physiological and Psychological Teaching," *Proceedings of the International Congress of Education*, pp. 717-20. New York: National Education Association, 1894.

Hill, Patty S. "Changes in Curricula and Method During the Last Twenty-Five Years in Kindergarten Education," *Addresses and Proceedings*, pp. 484-92. Washington, D.C.: National Education Association, 1925.

__________. "The Function of the Kindergarten," *Proceedings of Annual Meeting*, pp. 685-94. Washington, D.C.: National Education Association, 1926.

__________. *Kindergarten*. Reprint from the American Educator Encyclopedia, 1942. Washington, D.C.: Association for Childhood Education International, 1967.

__________. "Some Hopes and Fears for the Kindergarten of the Future," *Proceedings of the Twentieth Annual Meeting*, pp. 89-101. Washington, D.C.: International Kindergarten Union, 1913.

Hofer, Marie R. "Music in the Kindergarten," *Journal of Proceedings and Addresses*, pp. 479-84. Washington, D.C.: National Education Association, 1911.

Holmes, Manfred J. (ed.). *The Co-ordination of the Kindergarten and the Elementary School*. National Society for the Study of Education, Seventh Yearbook, Part II. Chicago: The University of Chicago, 1908.

__________. *The Kindergarten and Its Relation to Elementary Education*. National Society for the Study of Education, Sixth Yearbook, Part II. Chicago: The University of Chicago Press, 1907.

Holmes, M. C. "Practical Suggestions on How the Project Method May Be Carried Out Under the Average Crowded Conditions of the Public Schools," *Proceedings of the Twenty-Eighth Annual Meeting*, pp. 211-12. Detroit, Michigan: International Kindergarten Union, 1921.

Hughes, Ada M. "How Does the Routine of the Kindergarten Develop the Child Physically?" *Journal of Proceedings and Addresses*, pp. 347-50. Washington, D.C.: National Education Association, 1905.

Luckey, G. W. A. "The Mental Development of Children," *Addresses and Proceedings*, pp. 326-29. Washington, D.C.: National Education Association, 1918.

Meek, Lois H. (chm.). "The Kindergarten in Relation to Preschool and Parental Education," *Preschool and Parental Education*, pp. 247-57. National Society for the Study of Education, The Twenty-Eighth Yearbook. Bloomington, Illinois: Public School Publishing Company, 1929.

O'Shea, M. V. "Current Criticism of the Kindergarten," *Journal of Proceedings and Addresses*, pp. 365-70. Washington, D.C.: National Education Association, 1905.

__________. "Interests in Childhood," *Journal of Proceedings and Addresses*, pp. 873-81. Washington, D.C.: National Education Association, 1896.

Palmer, Luella A. "Method of Child Study in the Kindergarten," *Journal of Proceedings and Addresses*, pp. 794-97. Washington, D.C.: National Education Association, 1904.

__________. "The Principle of Development as the Basis for the Kindergarten Method," *Journal of Proceedings and Addresses*, pp. 378-84. Washington, D.C.: National Education Association, 1910.

Palmer, Luella and M. G. Waite. *How the Kindergarten Educates*. Bureau of Education Kindergarten Circular No. 18. Washington, D.C.: Department of the Interior, April, 1925.

Parker, Col. Francis W. "Application of Child Study in the School," *Journal of Proceedings and Addresses*, pp. 418-29. St. Paul, Minnesota, 1895.

Parlin, Frank E. "The Kindergarten of the Future," *Journal of Proceedings and Addresses*, pp. 511-15. Washington, D.C.: National Education Association, 1911.

"Report of the Committee of Nineteen," *Proceedings of the Twelfth Annual Meeting*, pp. 32-36. Toronto, Canada: International Kindergarten Union, 1905.

Root, William T. *PreFirst-Grade Training*. Bureau of Education Kindergarten Circular No. 13. Washington, D.C.: Department of the Interior, 1923.

Rowe, Stuart H. "The School and the Child's Physical Development," Journal of Proceedings and Addresses, pp. 742-49. Washington, D.C.: National Education Association, 1905.

Schallenberger, Margaret E. "Motive for Work," Journal of Proceedings and Addresses, pp. 462-67. Washington, D.C.: National Education Association, 1907.

Tanner, Amy E. "The Child as the Center of Correlation in the Kindergarten," Journal of Proceedings and Addresses, pp. 384-88. Washington, D.C.: National Education Association, 1910.

Temple, Alice. "The Factor of Environment," Journal of Proceedings and Addresses, pp. 507-10. Washington, D.C.: National Education Association, 1908.

Vandewalker, Nina C. Suggestions Concerning the Application of the Project Method to Kindergarten Education. Bureau of Education Kindergarten Circular No. 12. Washington, D.C.: Department of the Interior, April, 1923.

Watkins, Catherine R. "Changing Conceptions of the Kindergarten as the Outgrowth of New Insight," Addresses and Proceedings, pp. 970-74. Washington, D.C.: National Education Association, 1922.

Woods, Elizabeth. "Individual Differences in Kindergarten Children," Addresses and Proceedings, pp. 198-202. Washington, D.C.: National Education Association, 1920.

C. PERIODICALS

Acher, R. A. "Spontaneous Constructions and Primitive Activities of Children Analogous to Those of Primitive Man," The American Journal of Psychology, 21:114-50, January, 1910.

Anderson, John E. "Changing Emphases in Early Childhood Education," School and Society, 49:1-9, January 7, 1939.

__________. "Child Development: An Historical Perspective," Child Development, 27:181-96, June, 1956.

__________. "A Half Century of Learning About Children," NEA Journal, 42:139-41, March, 1953.

Baldwin, Bird T. "William James' Contributions to Education," The Journal of Educational Psychology, 2:369-82, August, 1911.

Baldwin, J. Mark. "A New Method of Child Study," *Science*, 21:213-14, April 21, 1893.

Beck, Robert H. "Progressive Education and American Progressivism: Caroline Pratt," *Teachers College Record*, 60:129-37, December, 1958.

Burnham, William H. "Education from the Genetic Point of View," *The Elementary School Teacher*, 6:117-24, October, 1905.

Butler, Nicholas M. "Some Criticisms of the Kindergarten," *Educational Review*, 18:285-91, October, 1899.

Button, Henry W. "Committee of Fifteen," *History of Education Quarterly*, 5:253-63, December, 1965.

Childs, John L. "John Dewey and American Education," *Teachers College Record*, 61:128-33, December, 1959.

"The Child-Study Wave," *Kindergarten Magazine*, 8:574-76, April, 1896.

Chrisman, Oscar. "Child-Study, A New Department of Education," *The Forum*, 16:728-36, February, 1894.

__________. "The Results of Child-Study," *Education*, 18:323-32, February, 1898.

Colvin, Stephen S. "The Child's World of Imagination," *The Elementary School Teacher*, 6:327-42, March, 1906.

Cremin, Lawrence A. "The Progressive Movement in American Education: A Perspective," *Harvard Educational Review*, 27:251-70, Fall, 1957.

__________. "What Happened to Progressive Education?" *Teachers College Record*, 61:23-29, October, 1959.

Cronise, Caroline C. "The Art Work in the Kindergarten," *The Elementary School Teacher*, 10:240-47, January, 1910.

Dewey, John. "Imagination and Expression," *Kindergarten Magazine*, 9:61-69, September, 1896.

Dewey, John (ed.). "Kindergarten," *The Elementary School Record*, Monograph No. 5, 1:127-51, June, 1900.

Dewey, John. "Progressive Education and the Science of Education," *Progressive Education*, 5:197-204, July-August-September, 1928.

Eby, Frederick. "The Reconstruction of the Kindergarten," *Pedagogical Seminary*, 7:229-86, July, 1900.

Ellis, Caswell and G. S. Hall. "A Study of Dolls," *Pedagogical Seminary*, 4:129-75, December, 1896.

Frear, Caroline. "Imitation: A Study Based on E. H. Russell's Child Observation," *Pedagogical Seminary*, 4:384-86, April, 1897.

Gallup, Ruth. "Oral Composition in the Kindergarten," *Education*, 47:164-69, November, 1926.

Gesell, Arnold. "The Changing Status of the Pre-School Child," *Progressive Education*, 2:8-10, January-February-March, 1925.

__________. "Research in Child Development," *School and Society*, 29:765-66, June 15, 1929.

Hall, G. Stanley. "Child-Study and Its Relation to Education," *The Forum*, 29:688-702, August, 1900.

__________. "Child-Study: The Basis of Exact Education," *The Forum*, 16:429-41, December, 1893.

__________. "A Children's Institute," *Harper's Monthly Magazine*, 120:620-24, March, 1910.

__________. "General Outline of the New Child Study Work at Clark University," *Pedagogical Seminary*, 17:160-65, June, 1910.

__________. "The Ideal School as Based on Child Study," *The Forum*, 32:24-27, September, 1901.

__________. "The National Child Welfare Conference: Its Work and Its Relation to Child Study," *Pedagogical Seminary*, 17:497-504, December, 1910.

__________. "Syllabi for Child Study," *Kindergarten Magazine*, 8:27, February, 1896.

__________. "Thoughts for the Kindergartners," *Kindergarten Magazine*, 9:220-21, November, 1896.

__________. "What Is to Become of Your Baby?" *Cosmopolitan*, 48:661-68, April, 1910.

Harris, William T. "The Study of Arrested Development in Children As Produced by Injudicious School Methods," *Education*, 20:453-66, April, 1900.

Herrick, Virgil E. (chm.). "The Educational Program: Early and Middle Childhood," *Review of Educational Research*, 23:111-89, 1953.

Hill, Patty S. "Changes in Curricula and Method in Kindergarten Education," Childhood Education, 2:99-106, November, 1925.

Hill, Patty S. (ed.). "Experimental Studies in Kindergarten Theory and Practice," Teachers College Record, 15:1-70, January, 1914.

Hill, Patty S. "First Steps in Character Education," Childhood Education, 3:355-59, April, 1927.

__________. "The Future of the Kindergarten," Teachers College Record, 10:29-56, November, 1909.

__________. "Kindergartens of Yesterday and Tomorrow," The Kindergarten-Primary Magazine, 29:4-6, September, 1916.

Hofer, Amalie. "The Chicago Normal Training School--a Dream Come True," Kindergarten Magazine, 9:168-97, November, 1896.

Hunter, Frederick M. "The Modern Kindergarten," The Journal of the National Education Association, 14:191-92, June, 1925.

"Illinois Society for Child-Study," Kindergarten Magazine, 8:529, March, 1896.

Jones, Robert. "Mental Hygiene in Childhood," Westminster Review, 167: 423-35, April, 1907.

Khan, Aftab Ahmad. "Child Development in Higher Education," Childhood Education, 44:308-12, January, 1968.

"Kindergarten Day at Worcester," Kindergarten Magazine, 9:82-83, September, 1896.

Lane, A. "The Child Mind," Athenaeum, 1:82, January 17, 1903.

Lowden, T. S. "Pedagogical Inferences from Child-Study," Education, 18:45-50, September; 112-16, October; 171-79, November, 1897.

MacLear, Martha. "The Froebel Fetich," Educational Review, 46:330-34, November, 1913.

Meek, Lois H. "Child Study in the Preschool Field," Progressive Education, 3:39-44, January-February-March, 1926.

Mitchell, David. "Psychological Examination of Pre-School Age Children," School and Society, 15:561-68, May 20, 1922.

Morrill, Bertha F. "Child Study--Some of Its Aims and Methods," Education, 17:374-77, 432-34, February-March, 1897.

Nason, Charles D. "Some Biological Aspects of Child Study," *Education*, 18:229-34, December, 1897.

O'Shea, M. V. "Pre-School Education," *Progressive Education*, 2:11-14, January-February-March, 1925.

__________. "Some Recent Literature on Child-Study," *Science*, 8:552-59, October 21, 1898.

Palmer, Luella A. "Some Reconstructive Movements Within the Kindergarten," *The Psychological Clinic*, 8:97-107, June 1 , 1913.

Parker, Samuel C. "Project Teaching: Pupils Planning Practical Activities, II," *The Elementary School Journal*, 22:427-40, February, 1922.

"A Pedagogical Experiment," *Kindergarten Magazine*, 8:739-42, June, 1896.

Pratt, C. L. "Toys: A Usurped Educational Field," *Survey*, 26:893-95, September 23, 1911.

"A Quarter of a Century in Kindergarten History," *Kindergarten Magazine*, 8:280-83, December, 1895.

Robinson, Isabel. "A Project in Community Life in the Kindergarten," *The Elementary School Journal*, 22:194-203, November, 1921.

Ross, Mary. "Before Six," *Survey*, 55:30-33, 61, October 1, 1925.

Rowe, Stuart H. "Action and Reaction in Primary Schools," *Education*, 27:420-29, March, 1907.

__________. "The Present Status of Child Study and Its Suggestions to the Practical Teacher," *Education*, 17:400-406, March, 1897.

Schaeffer, Mary F. "Conservatism Versus Radicalism in the Kindergarten," *Education*, 27:37-44, September, 1906.

Seashore, C. E. "Suggestions for Tests on School Children," *Educational Review*, 22:69-82, June, 1901.

Shiels, Albert. "The Unique Function of the Kindergarten in the Modern School," *School and Society*, 6:160-65, August 11, 1917.

Sisson, Genevra. "An Axis for Kindergarten Activity," *Kindergarten Magazine*, 9:699-702, May, 1897.

Smith, Coleen M. "A Study to Determine the Effectiveness of Kindergarten Training," *The Elementary School Journal*, 25:451-66, February, 1925.

Snedden, David. "Problems of the Place and Functions of the Kindergarten," School and Society, 15:233-41, March 4, 1922.

"Study of Children of Preschool Age," Elementary School Journal, 22:410-11, February, 1922.

"Summer Schools for the Study of the Individual Child," School and Society, 30:501-502, October 12, 1929.

"Third Annual Congress of the Illinois Society for Child-Study," Kindergarten Magazine, 8:766-67, June, 1896.

Thorndike, Edward L. "The Contribution of Psychology to Education," The Journal of Educational Psychology, 1:5-12, 1910.

__________. "Notes on Psychology for Kindergartners," Teachers College Record, 4:45-76, November, 1903.

Waite, Mary G. "American Education and the Kindergarten," School Life, 9:51, November, 1923.

__________. "How the Kindergarten Prepares Children for Primary Work," School Life, 9:91-92, December, 1923.

Walter, Harvey L. "Opening Address--International Kindergarten Union," Kindergarten Magazine, 8:518-22, March, 1896.

Whitney, A. S. "Some Practical Results of Child Study," Education, 16:466-73, April, 1896.

"Yale Studies of the Pre-School Child," Progressive Education, 2:33-34, January-February-March, 1925.

D. UNPUBLISHED MATERIALS

Jammer, M. Charlotte. "Patty S. Hill and Reform of the American Kindergarten." Unpublished Doctoral dissertation, Teachers College, Columbia University, New York City, 1960.

BIBLIOGRAPHY OF PROJECT HEAD START

A. BOOKS

Bereiter, Carl and S. Englemann. *Teaching Disadvantaged Children in the Preschool*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1966.

Bloom, Benjamin S. *Stability and Change in Human Characteristics*. New York: John Wiley and Sons, Inc., 1964.

Conant, James B. *Slums and Suburbs*. New York: McGraw-Hill Book Company, Inc., 1961.

Crow, Lester D., W. I. Murray, and H. H. Smythe. "Experentially Lack of the Culturally Deprived Child," *Educating the Culturally Disadvantaged Child*. New York: David McKay Company, Inc., 1966. Pp. 117-47.

Deutsch, Martin and associates. *The Disadvantaged Child*. New York: Basic Books, Inc., 1967.

Frost, Joe L. and G. R. Hawkes. *The Disadvantaged Child*. Boston: Houghton Mifflin Company, 1966.

Gordon, Edmund G. and D. A. Wilkerson. "Preschool Programs," *Compensatory Education for the Disadvantaged*. New York: College Entrance Examination Board, 1966. Pp. 47-53.

Gray, Susan W. and others. "The Early Training Project: An Overview," *Before First Grade*. New York: Teachers College Press, Teachers College, Columbia University, 1966. Pp. 1-5.

Hamlin, Ruth, R. Mukerji and M. Yonemura. *Schools for Young Disadvantaged Children*. New York: Teachers College Press, Teachers College, Columbia University, 1967.

Harrington, Michael. *The Other America*. New York: The Macmillan Company, 1962.

Hechinger, Fred M. (ed.). *Pre-School Education Today*. Garden City, New York: Doubleday and Company, Inc., 1966.

Hess, Robert D. and V. Shipman. "Early Blocks to Children's Learning," *The Disadvantaged Learner: Knowing, Understanding, Educating*, Staten W. Webster, editor. San Francisco: Chandler Publishing Company, 1966. Pp. 276-85.

Krider, Mary A. and M. Petsche. An Evaluation of Head Start Preschool Enrichment Programs as They Affect the Intellectual Ability, the Social Adjustment, and the Achievement Level of Five-Year-Old Children Enrolled in Lincoln, Nebraska. Lincoln, Nebraska: University of Nebraska, 1967.

Passow, A. Harry (ed.). Education in Depressed Areas. New York: Bureau of Publications, Teachers College, Columbia University, 1963.

Riessman, Frank. The Culturally Deprived Child. New York: Harper and Row, Publishers, 1962.

B. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS

Alexander, Marie. Project Head Start--Nutrition--Staff Training Programs. Office of Economic Opportunity. Washington: Government Printing Office, 1967.

Berson, Minnie P. Project Head Start--Daily Program III. No. 11. Office of Economic Opportunity. Washington: Government Printing Office, 1967.

Biber, Barbara. Young Deprived Children and Their Educational Needs. Washington: Association for Childhood Education International, 1967.

Bloom, Benjamin S., A. Davis and R. Hess. Compensatory Education for Cultural Deprivation. Research Conference on Education and Cultural Deprivation. New York: Holt, Rinehart and Winston, Inc., 1965.

Burgess, Evangeline. Values in Early Childhood Education. Department of Elementary-Kindergarten-Nursery Education. Washington: National Education Association, 1965.

Community Action Program, Office of Economic Opportunity. How to Apply for a Head Start Child Development Program. Washington: Government Printing Office, September, 1966.

Department of Elementary-Kindergarten-Nursery Education. "What We Learned from Project Head Start 1965," Elementary Instructional Service. Washington: National Education Association, n.d.

Educational Policies Commission. Universal Opportunity for Early Childhood Education. Washington: National Education Association, 1966.

Education U.S.A. (ed.). "First Things Before First Grade," *The Shape of Education for 1964-65*, pp. 13-16. Washington: National School Public Relations Association, National Education Association, 1964.

Getzels, J. W. "Pre-School Education," *Contemporary Issues in American Education*, pp. 105-14. Consultants' Papers for the White House Conference on Education, July 20-21, 1965. United States Department of Health, Education, and Welfare, Office of Education. Washington: Government Printing Office, 1965.

Graham, Jory. *Handbook for Project Head Start*. New York: Anti-Defamation League of B'nai B'rith, n.d.

Hersey, John. "Education: An Antidote to Poverty," *Teaching the Disadvantaged Young Child*, pp. 111-17. Washington: National Education Association for the Education of Young Children, 1966.

Mackintosh, Helen K., L. Gore and G. M. Lewis. *Educating Disadvantaged Children Under Six*. No. 1. United States Department of Health, Education, and Welfare, Office of Education. Washington: Government Printing Office, 1965.

Office of Economic Opportunity. *Beautiful Junk--Project Head Start*. Washington: Government Printing Office, 1967.

__________. *Head Start Child Development Programs*. Washington: Government Printing Office, n.d.

__________. *Head Start Newsletter*, 2:1-8, January, 1967.

__________. *Head Start Newsletter*, 2:1-8, July, 1967.

__________. *Head Start Newsletter*, 1:1-8, November, 1966.

__________. *The Physician and Project Head Start*. Washington: Government Printing Office, 1967.

__________. *Project Head Start--Daily Program I*. No. 4. Washington: Government Printing Office, n.d.

__________. *Project Head Start--Equipment and Supplies*. No. 9. Washington: Government Printing Office, n.d.

__________. *Project Head Start Fact Sheet*. 1967.

__________. *Project Head Start--Health Services*. No. 2. Washington: Government Printing Office, 1967.

__________. *Project Head Start--Medical*. Guide for Directors of Child Development Centers. Washington: Government Printing Office, n.d.

__________. Project Head Start--Nutrition. No. 3. Washington: Government Printing Office, n.d.

__________. Project Head Start--Parents Are Needed. No. 6. Washington: Government Printing Office, n.d.

__________. Project Head Start--Points for Parents. No. 10. Washington: Government Printing Office, 1967.

__________. Project Head Start--Social Services. No. 8. Washington: Government Printing Office, n.d.

__________. Project Head Start--the Staff. No. 1. Washington: Government Printing Office, 1967.

__________. Project Head Start--Volunteers. No. 5. Washington: Government Printing Office, n.d.

__________. The Quiet Revolution. Washington: Government Printing Office, 1967.

Office of Economic Opportunity Community Action Program. Head Start Child Development Programs--A Manual of Policies and Instructions. Washington: Government Printing Office, September, 1967.

"Quick Facts on the Programs of the Office of Economic Opportunity," May, 1967.

United States Congress. Economic Opportunity Act of 1964, as Amended. Amendments included through December 1, 1966. Washington: Government Printing Office, 1967.

__________. Economic Opportunity Amendments of 1966. An Act, 89th Congress, Public Law 89-794, November 8, 1966. Washington: Government Printing Office, 1966.

United States Congress, House of Representatives. Economic Opportunity Amendments of 1965. Conference Report, 89th Congress, 1st Session, on H. R. 8283, September 22, 1965. Washington: Government Printing Office, 1965.

United States Congress, House of Representatives, Committee on Education and Labor. Economic Opportunity Amendments of 1965. Report, 89th Congress, 1st Session, on H. R. 8283, May 27, 1965. Washington: Government Printing Office, 1965.

United States Congress, Senate Committee on Labor and Public Welfare. Economic Opportunity Amendments of 1966. Report together with Supplemental, Individual, and Additional Views, 89th Congress, 2d Session, on S. 3164, September 29, 1966. Washington: Government Printing Office, 1966.

United States Department of Health, Education, and Welfare. The White House Conference on Education. Washington: Government Printing Office, 1965.

United States Department of Health, Education, and Welfare, Office of Education. National Conference on Education of the Disadvantaged. Report of a National Conference, July 18-20, 1966. Washington: Government Printing Office, 1966.

United States Office of Education and the Office of Economic Opportunity. Education: An Answer to Poverty. Washington: Government Printing Office, 1966.

C. PERIODICALS

"Against Poverty," Children, 12:81-82, March-April, 1965.

"The Aims of 'Follow Through'," Phi Delta Kappan, 49:62, September, 1967.

Ausubel, David P. "A Teaching Strategy for Culturally Deprived Pupils: Cognitive and Motivational Considerations," School Review, 71:454-63, Winter, 1963.

Baker, Rebecca and A. Rohweder. "Head Start Around the Calendar," Illinois Education, 55:160-64, December, 1966.

Bereiter, Carl. "Are Preschool Programs Built the Wrong Way?" Nation's Schools, 77:55-56, 92, June, 1966.

Berson, Minnie P. "Save Them Young," American Education, 3:5-8, July-August, 1967.

Book, Margaret. "Parents Get Involved in Head Start," International Journal of Religious Education, 42:8-9, July-August, 1966.

Boutwell, William D. "Education? Help for Head Start," The PTA Magazine, 61:16, April, 1967.

Bradley, Helen. "Project Head Start," Illinois School Journal, 47: 112-15, Summer, 1967.

__________. "Science: The World Opens for Head Start Children," Science and Children, 5:31-32, November, 1967.

Brazziel, William F. "Two Years of Head Start," *Phi Delta Kappan*, 48:344-48, March, 1967.

Bronfenbrenner, Urie. "The Split-Level American Family," *Saturday Review*, 50:60-66, October 7, 1967.

Bruner, Jerome S. "The Course of Cognitive Growth," *American Psychologist*, 19:1-15, January, 1964.

Brunner, Catherine. "A Lap to Sit On--And Much More!" *Childhood Education*, 43:20-23, September, 1966.

Butler, Annie L. "Will Head Start Be a False Start?" *Childhood Education*, 42:163-66, November, 1965.

Charlaton, Charles S. "Head Start or False Start," *American Education*, 2:20-22, September, 1966.

Crosby, Muriel. "A Portrait of Blight," *Educational Leadership*, 20: 300-304, February, 1963.

Della-Dora, Delmo. "The Culturally Disadvantaged," *Exceptional Children*, 28:467-72, May, 1962.

Denny, Maureen E. "Legislation," *Young Children*, 22:58-60, October, 1966.

Deutsch, Martin. "Papers from the Arden House Conference on Pre-School Enrichment," *Merrill-Palmer Quarterly*, 10:207-208, July, 1964.

__________. "Nursery Education: The Influence of Social Programming on Early Development," *The Journal of Nursery Education*, 18:191-97, April, 1963.

Doherty, James. "Pupil-Teacher Ratio in Head Start Centers," *Childhood Education*, 43:7-8, September, 1966.

Draper, Bessie. "A New Voice in Education," *Communities in Action*, 2:29-31, April-May, 1967.

"The Early Years," *Grade Teacher*, 84:84-121, December, 1966.

"Educators and Slum Problems," *Phi Delta Kappan*, 49:112, October, 1967.

Egland, George O. "Parents in Head Start Programs," *Young Children* 21:293-96, May, 1966.

Estes, Nolan. "Follow Through," *American Education*, 3:12-14, September, 1967.

"Follow Through Program Launched in Pilot Stage," NEA Journal, 56:3, September, 1967.

Francois, Bill. "Head Start in West Virginia," Saturday Review, 48:61, December 18, 1965.

Gans, Roma. "They Must Talk Before They Read," Grade Teacher, 84:100, 102, December, 1966.

"Ghetto Parent Education," Phi Delta Kappan, 49:283, January, 1968.

Gray, Susan W. and R. A. Klaus. "An Experimental Preschool Program for Culturally Deprived Children," Child Development, 36:887-98, December, 1965.

Greenberg, Polly. "CDGM: . :An Experiment in Preschool for the Poor--by the Poor," Young Children, 22:307-15, May, 1967.

Hardberger, Philip. "The Moral War," Communities in Action, 2:4-5, October-November, 1967.

__________. "The Watershed," Communities in Action, 2:7-9, April-May, 1967.

Hechinger, Fred M. "Head Start to Where?" Saturday Review, 48:58-60, 75, December 18, 1965.

Heffernan, Helen. "A Challenge to the Profession of Early Childhood Education," The Journal of Nursery Education, 19:237-41, September, 1964.

__________. "New Opportunity for the Preschool Child," Childhood Education, 41:227-30, January, 1965.

Hess, Robert D. and V. C. Shipman. "Early Experience and the Socialization of Cognitive Modes in Children," Child Development, 36:869-78, December, 1965.

Howard, A. Eugene. "Following Through with Federal Funds," Childhood Education, 44:16-21, September, 1967.

Huston, Richard A. "Head Start: We're Past the Trial Run," Instructor, 76:25-27, 128, December, 1966.

Hymes, James L. Jr. "Emerging Patterns in Early Childhood Education," Young Children, 22:158-63, January, 1967.

"In An OEO Center," American School and University, 39:24, March, 1967.

Kelley, Earl C. "Seeds of Drop-Outs," Childhood Education, 39:420-22, May, 1963.

Kerckhoff, Richard K. "Race and Social Class as Opportunities for Early Childhood Education," Young Children, 20:357-62, September, 1965.

Kidd, Aline H. and R. M. Kidd. "The Head Start Classroom as a Therapeutic Environment," Young Children, 23:170-74, January, 1968.

Koegler, Ronald R. and L. Pearce. "Early Education for the Culturally Disadvantaged," The American Montessori Society Bulletin, 3:1-7, Fall, 1965.

Kraft, Ivor. "Are We Overselling the Pre-School Idea?" Saturday Review, 48:63, December 18, 1965.

Kvaraceus, William C. "Programs for the Disadvantaged: Promise or Pretense?" The National Elementary Principal, 45:59-64, February, 1966.

Lang, Mary B. "The Alienated Speak," Educational Leadership, 24:589-94, April, 1967.

Larson, Richard and J. L. Olson. "A Method of Identifying Culturally Deprived Kindergarten Children," Exceptional Children, 30:130-34, November, 1963.

Lehew, Charmon. "The Performance of Four-and Five-year Old Children in Operation Head Start on Selected Arithmetic Abilities," The Arithmetic Teacher, 15:53-59, January, 1968.

Levens, Dorothy. "A Look at Project Head Start," Childhood Education, 42:481-83, April, 1966.

Loewenberg, Frank M. "Who Did NOT Attend Head Start?" Childhood Education, 43:309-10, January, 1967.

Marburger, Carl L. "The Economic Opportunity Act--and the Schools," Educational Leadership, 22:547-48, 591, May, 1965.

Mayer, Martin. "Stop Waiting for Miracles," The PTA Magazine, 61:19, 21, November, 1966.

Mindess, Mary and A. V. Keliher. "Review of Research Related to the Advantages of Kindergarten," Childhood Education, 43:505-12, May, 1967.

Mukerji, Rose and H. F. Robison. "Teaching Strategies for Disadvantaged Kindergarten Children," Young Children, 21:195-99, March, 1966.

Nagy, Jill. "Head Start in Suburbia," *Saturday Review*, 48:62, 75-76, December 18, 1965.

"Off to a Head Start with a Relocatable Classroom," *American School and University*, 39:34-36, November, 1966.

Olson, James L. and R. G. Larson. "An Experimental Curriculum for Culturally Deprived Kindergarten Children," *Educational Leadership*, 22:553-58, 618, May, 1965.

Omwake, Eveline B. "From the President," *Young Children*, 23:130-31, January, 1968.

__________. "Has Head Start Made a Difference?" *Childhood Education*, 42:479-80, April, 1966.

Osborn, D. Keith. "A Look at Child Development Centers--Operation Head Start," *The Reading Teacher*, 19:332-34, February, 1966.

__________. "Some Gains from the Head Start Experience," *Childhood Education*, 44:8-11, September, 1967.

Park, Jeanne S. "Follow Through to Follow Head Start," *The American School Board Journal*, 155:5-8, August, 1967.

Perkins, Hugh V. "Federal Participation and Its Results," *Educational Leadership*, 24:39-45, October, 1966.

Pines, Maya. "Slum Children Must Make Up for Lost Time," *New York Times Magazine*, October 15, 1967, pp. 66-87.

"Preprimary Programs," *Nation's Schools*, 77:48-68, 90, 92, June, 1966.

"Preschool Programs Strive to Start Deprived Children on Par with Others," *The Nation's Schools*, 73:84, June, 1964.

"President Johnson's Special Message to Congress: Children and Youth," *The PTA Magazine*, 61:20-22, March, 1967.

"President's 1968 Budget Request," *American School and University*, 39:20, March, 1967.

"Project Head Start--the Record After Two Years," *U.S. News and World Report*, 62:72-74, June 19, 1967.

Ray, Henry W. "Audiovisual Resources in Head Start," *Audiovisual Instruction*, 11:545-46, September, 1966.

Rice, Arthur R. "New Federal Programs May Be Poor Solutions for the Poor--Where Head Start Fails," *Nation's Schools*, 77:10-12, May, 1966.

Richmond, Julius B. "Beliefs in Action," Childhood Education, 44:4-7, September, 1967.

__________. "Communities in Action: A Report on Project Head Start," The Reading Teacher, 19:323-31, February, 1966.

Sacadat, Evelyn. "Head Start Makes a Discovery," Illinois Education, 55:212-14, January, 1967.

"Schools Make News," Saturday Review, 50:74, October 21, 1967.

Shaw, Frederick. "The Changing Curriculum--Political Influences on the Curriculum," Review of Educational Research, 36:346-47, June, 1966.

Shriver, R. Sargent. "After Head Start--What?" Childhood Education, 44:2-3, September, 1967.

Silberstein, Richard M. and others. "Can Head Start Help Children Learn?" The Reading Teacher, 19:347-51, February, 1966.

Slaven, James J. "Montessori Head Start," Audiovisual Instruction, 11:546-49, September, 1966.

Spodek, Bernard. "Poverty, Education, and the Young Child," Educational Leadership, 22:593-602, May, 1965.

Taba, Hilda. "Cultural Deprivation as a Factor in School Learning," Merrill-Palmer Quarterly, 10:147-59, April, 1964.

"Thirty Two Billion Dollars--How It's Portioned Out--Head Start," School Management, 10:67-69, December, 1966.

"Urge Grants for Disadvantaged," Phi Delta Kappan, 49:91, October, 1967.

Usdan, Michael D. and R. O. Nystrand. "Towards Participative Decision-making: The Impact of Community Action Program," Teachers College Record, 68:95-106, November, 1966.

Wager, Deborah. "The Ten Biggest Myths About OEO," Communities in Action, 2:22-24, April-May, 1967.

"What the Preschool Programs Learned About the Deprived Child in New Haven, Connecticut, Dade County, Florida, and Baltimore, Maryland," Grade Teacher, 83:74-79, 103-104, 126, 180-84, September, 1965.

Widmer, Emmy L. "Head Start Kindergarten: A Step Up," Childhood Education, 44:22-26, September, 1967.

Wilkerson, Doxey. "Programs and Practices in Compensatory Education for Disadvantaged Children--Preschool Programs," Review of Educational Research, 35:434-37, December, 1965.

Wolf, Max and A. Stein. "Head Start Six Months Later," Phi Delta Kappan, 48:349-50, March, 1967.

Wolf, Max. "Is the Bridge Completed?" Childhood Education, 44:12-15, September, 1967.

D. UNPUBLISHED MATERIALS

Community Action Program. "Community Action Program Fact Sheet." Washington: Office of Economic Opportunity, March, 1967. (Mimeographed.)

Cooke, Robert. "Improving the Opportunities and Achievements of the Children of the Poor." Planning Committee Project Head Start, 1965. (Mimeographed.)

Keyserling, Mary D. "Address to YWCA National Affairs Committee Conference." Washington: United States Department of Labor, May 13, 1965. (Mimeographed.)

Stanton, Constance. "An Evaluation: The Transition from Head Start to Kindergarten." Option II Paper. Lincoln, Nebraska: University of Nebraska, May, 1967.

E. NEWSPAPERS

Arnold, Mark R. "Why 'Head Start,' Public Success, Sometimes Fails," National Observer, September 4, 1967, pp. 1, 14.

Cahn, Robert. "Compromise Notched in Head Start Battle," Christian Science Monitor, December 23, 1966, p. 3.

Hornaday, Mary. "Preschool Children 'Rescued'," Christian Science Monitor, September 4, 1965, p. 10.

Maggin, Donald L. "Will Success Spoil Head Start?" Christian Science Monitor, January 5, 1966, p. 9.

Washington Monitor, Supplement to Education, USA, February 10, 1966.

APPENDIX A

CHRONOLOGY OF SIGNIFICANT DEVELOPMENTS OF THE FROEBEL KINDERGARTEN IN EUROPE AND AMERICA

CHRONOLOGY OF SIGNIFICANT DEVELOPMENTS OF KINDERGARTEN IN GERMANY AND EUROPE

1835	Froebel directed an orphanage at Burgdorf, Switzerland
1837	He began to work out his gifts and occupations
	He opened an "Institution for the Education of Little Children" at Blankenburg, Germany
1838	Froebel published his first Sunday Journal (1838-40)
1839	Froebel and Middendorf opened the "Institution for the Care of Little Children" at Dresden
1840	Opened a similar school in Frankfurt
	Creation of the "Universal German Kindergarten" at Blankenburg as a joint-stock company
	Froebel and Middendorf made frequent journeys to various parts of Germany to promote the kindergarten movement
1843	Publication of "Songs for Mothers and Nursery Songs"
1846	Fifth kindergarten opened in Germany
1847	Ten more kindergartens opened
1848	Kindergarten opened in Hamburg
1849	Froebel moved the kindergarten to Liebenstein, intending to train kindergarten teachers, Luise Levin directress
	Pamphlet by Folsing published against the kindergarten, controversy continued
1850	Through Madame von Marenholtz-Bülow, Froebel received the country-seat of Marienthal from the Duke of Meiningen for the purpose of a training college for kindergarten teachers
1851	Education Minister prohibited the kindergarten in Prussia in August
1852	Froebel received a standing ovation at the Educational Conference at Gotha
	Froebel died

1852	College at Marienthal was moved to Keilhau, under the leadership of Middendorf and Luise Froebel
1853	Middendorf was enthusiastically received by the Congress at Salzungen where he addressed the assembly on Froebelian methods
1854	Luise Froebel became the Directress of the Public Free Kindergarten and teacher training in Hamburg
	Kindergarten movement began in England
	Madame von Marenholtz-Bülow began her promotion of the kindergarten in Europe
1860	Froebel Society of Berlin was established
1874	Froebel Society of London was established, Miss Shirreff president
1876	First examination for kindergarten teachers by the London Froebel Society
1884	International exhibition at London on Health and Education, kindergarten section, exhibition of work and materials, model lessons at weekly intervals, arranged by British and Foreign School Society
1887	National Froebel Union established, composed of several Kindergarten Associations for the purpose of examining kindergarten teachers and governesses

CHRONOLOGY OF SIGNIFICANT DEVELOPMENTS OF KINDERGARTEN IN AMERICA

1854	Henry Barnard attended the Exhibition of Educational Systems and Material in London, publicized the kindergarten in America
1855	First German kindergarten established by Mrs. Carl Schurz, Watertown, Wisconsin
1860	First English kindergarten established by Elizabeth Peabody in Boston
1867	E. Peabody studied kindergartens in Europe
1868	E. Peabody began her promotion of the kindergarten, with the assistance of her sister Mrs. Horace Mann, by lecturing and writing
	First training school for kindergarten teachers begun in Boston by Mrs. Matilde Kriege and daughter
1870	First report by the Bureau of Education on kindergarten culture
	First charity kindergarten established in College Point, New York
	Milton Bradley began the manufacture of Froebel materials
1872	Emma Marwedel had a German-American kindergarten and a Froebelian training school in Washington, D.C.
	Baroness von Marenholtz-Bülow's lectures were republished by the United States Commissioner of Education
	Maria Kraus-Boelte established the New York Normal Training School, Susan Blow, student
1873	Publication of *Kindergarten Messenger* (1873-1877)
	First public school kindergarten in St. Louis by Susan Blow, W. T. Harris Superintendent
1874	Susan Blow began the training of kindergarten teachers in St. Louis
1876	Kindergarten exhibition at the Centennial Exposition in Philadelphia

1876	E. Marwedel established a kindergarten and first normal class in Los Angeles under the auspices of several organizations and the United States Bureau of Education, Kate Douglas Wiggin, student
1877	E. Peabody organized the American Froebel Union
1878	E. Marwedel established kindergartens in northern California
1880	From 1880-90 heightened interest in kindergarten
	Kindergarten organizations stimulated the incorporation of the kindergarten into the public school systems
	Susan Blow was inspector of more than fifty free kindergartens in St. Louis
	Kate Douglas Wiggin organized the California Kindergarten Training School
1881	Barnard published the *Kindergarten and Child Culture Papers*
1884	Kindergarten Department of the National Education Association was organized
1887	Anna Bryan opened a kindergarten training school in Louisville, Kentucky, Patty Smith Hill, student
1892	International Kindergarten Union established during a meeting of the National Education Association to consolidate smaller kindergarten organizations
1893	Extension of public interest in the kindergarten by exhibits and model kindergarten rooms operated by the International Kindergarten Union at the Columbia Exposition in Chicago
	Public school kindergartens were established in Omaha and Lincoln
1913	Division of Kindergarten Education created in the United States Office of Education
1930	International Kindergarten Union changed its name to Association of Childhood Education

APPENDIX B

CHRONOLOGY OF SIGNIFICANT DEVELOPMENTS OF THE MONTESSORI MOVEMENT IN EUROPE AND AMERICA

CHRONOLOGY OF SIGNIFICANT DEVELOPMENTS OF THE MONTESSORI MOVEMENT IN EUROPE

1894	Montessori, as a medical student and intern in the Psychiatric Clinic in Rome, worked with "idiot children" housed in the asylums
1896	Montessori was granted her medical degree
	Occupied the Chair of Hygiene at a women's college in Rome for ten years
1897	Assistant Director at the Psychiatric Clinic of the University of Rome--began work with mentally deficient children
1898	Director of the State Orthophrenic School in Rome for two years
1899	Defective children, whom Montessori had trained, passed public school examination
1900	Began seven years of study on applying her theories to normal children
1904	First publication: Pedagogical Anthropology
	Professor at the University of Rome--Chair of Anthropology for four years
1907	First "Children's House" opened in Rome
1908	Children's House established in Milan
	House of Labor, Milan began manufacture of didactic materials
1909	Four Children's Houses had been established
	Published: Scientific Pedagogy as Applied to Child Education in the Children's Houses
1911	International patent of the didactic apparatus arranged by Baron and Baroness Franchetti
	Switzerland passed a law establishing the Montessori system in all public schools
	Two model Montessori schools in Paris

1912	Intense interest in the Montessori method, visitors from all countries
	Preparations made to establish Montessori schools in England, India, China, Mexico, Korea, Argentina, Honolulu
	Montessori wrote five major books from 1912 to 1917
1913	First international training course in Rome, attended by seventy teachers (January)
1917	Montessori was Director of the Montessori Research Institute, Barcelona, Spain
1919	Director of biennial training courses in London until 1938
1922	Appointed government inspector of schools in Italy
1925	First International Montessori Congress held, Helsinki
1929	Association Montessori Internationale established, Dr. Montessori was president until her death
1933	Mussolini closed Montessori schools in Italy
1938	Montessori established the Montessori Training Center, Netherlands
1939	Montessori was Director of the training course at Adyar, Madras, India
1940	Circa. Interned in India as an enemy alien during World War II
1947	Montessori training center moved to London
1952	Death of Maria Montessori
	Mario Montessori became president of Association of Montessori Internationale with headquarters in Amsterdam

CHRONOLOGY OF SIGNIFICANT DEVELOPMENTS OF THE MONTESSORI MOVEMENT IN AMERICA

1909	Montessori education publicized in the Kindergarten Primary Magazine in December, 1909 and March, 1910
1911	First major publicity about Montessori in the United States in McClure's Magazine
	First Montessori school in the United States in Tarrytown, New York, a second one in Boston
	Many professors of United States colleges and universities went to Rome in autumn to investigate Montessori education
1912	Byoir established the House of Childhood in New York to manufacture Montessori materials
	Anne George, first American pupil of Montessori, opened a Montessori school in Washington, D.C.
	Translation of The Montessori Method by A. George available. The first edition of 5,000 copies sold in four days
1913	Four Montessori schools: Tarrytown, New York; Washington, D.C.: Berkeley and San Francisco in California
	McClure's Magazine began a regular department on Montessori, Ellen Stevens, editor
	Kilpatrick criticized Montessori's ideas at the annual International Kindergarten Union
1914	Circa. Alexander G. Bell formed the American Montessori Society and was elected first president
1915	Montessori lectured in Carnegie Hall, California, and other places, and addressed the National Education Association sponsored by McClure's Magazine
	International Training Course by Montessori accompanied by demonstration schools in San Francisco and San Diego, in connection with the Pacific International Exposition, from August to November
1916	One hundred eighty-nine authorized Montessori schools in the United States, over 2,000 schools used the Montessori name

1958	Nancy Rambusch established a Montessori school--Whitby School, Greenwich, Connecticut and the American Montessori Society
1962	Association Montessori Internationale (AMI) established the Washington Montessori Institute, Washington, D.C. for a training center Director of Training: Miss Margaret Stephenson
1964	More than 100 Montessori schools in the United States for children three to five years of age; thirty schools opened in autumn and forty more were being planned
1965	Montessori system used in some Head Start programs and other programs for the disadvantaged
	Reissues of Montessori books published
1966	AMI Training Centers established or beginning at Palo Alto, California; Philadelphia; and Atlanta, Georgia

APPENDIX C

CHRONOLOGY OF SIGNIFICANT DEVELOPMENTS OF THE CHILD STUDY MOVEMENT

CHRONOLOGY OF SIGNIFICANT DEVELOPMENTS OF THE CHILD STUDY MOVEMENT

1880	*The Contents of Children's Minds on Entering School* published by Dr. G. Stanley Hall, genetic psychologist and father of the child study movement
1883	Parker began experimentations at the Cook County Normal School, Chicago
1891	Publication of the periodical *Pedagogical Seminary* began, Hall, editor
1893	National Association for the Study of Children organized, Hall, president
1894	Department of Child Study of the National Education Association organized
	First state society for child study established in Illinois, Dewey and Parker, members
	Dewey began work at the University of Chicago, Head of the Department of Philosophy, Psychology and Pedagogy
1895	Publication of *Child Study Monthly* began
1896	Dewey established a laboratory school, an experimental school, in Chicago, with Mrs. Dewey
	First "Psychologic Clinic" established in Philadelphia
	North American Child-Study Conference organized to coordinate information on child study
	Child Study was taught at a dozen or more universities and normal schools
1897	Beginning of the publication of books by Dewey
1898	Clark University began publishing its annual bibliography on Child Study
	American Association of University Women began Child Study Program
1903	Committee of Nineteen was appointed with equal representation of the conservative and liberal fields of thought to explore the ideas about kindergarten training

1903	Thorndike published Notes on Child Study
1904	Department of Kindergarten established at Teachers College, Columbia University (Patty Hill, chairman) and the University of Chicago (Alice Temple, chairman)
1905	Teachers College, Columbia University, began one of the earliest experiments in kindergarten to apply the principles of democracy to school organization with children from three or four to six years of age; Speyer School, Luella Palmer, director
1906	First International Congress for Child Study in Berlin
1907	Binet began to develop an objective method of assessing a child's level of intelligence
1908	Binet's individual intelligence test, 1908 revision, introduced mental age
	Goddard translated Binet-Simon scale into English and adapted it to American children
	Child Study Association organized
1909	Committee of Nineteen presented its report at the annual meeting of the International Kindergarten Union
	First National Child Welfare Conference held to coordinate child study activities
	Children's Institute was founded which sponsored a repository for information and a disseminating center of service, correlating the scientific studies of children with practical methods for advancing their physical, mental, and moral well-being
	First White House Conference on Children held
1910	Conservative and liberal viewpoints of kindergarten united forces, determined to utilize the most recent developments of research in the field of childhood education
	Twenty-six journals devoted in part or whole to child study
	First American revision of Binet's intelligence test
1911	Revision of the Binet scale was standardized
	Yale Psycho-Clinic established for exceptional children, Arnold Gesell, director

1912	Federal Children's Bureau organized "to investigate and report upon all matters pertaining to the welfare of children and child life among all classes of our people"
1913	Caroline Pratt began her experiment in The City and Country School, New York City, cooperated with the Bureau of Educational Experiments for some years
	The School of Education of the University of Chicago unified kindergarten-primary teacher training; many colleges followed suit
1917	Iowa Welfare Research Station, State University, established the first university-related child development center
1918	Yale Clinic broadened to conduct research to establish norms of development of children from one month to five years of age
	Laura Spelman Rockefeller Memorial Foundation established (1918-38)
1919	Progressive Education Association organized (1919-55)
1920	Teachers College, Columbia University opened a nursery school
	Merrill-Palmer Institute of Human Development and Family Life established in Detroit
	Committee on Child Development, National Research Council, organized
1921	Merrill-Palmer nursery school opened
1924	Yale nursery school opened
	Child Welfare Institute, Teachers College, Columbia University, established
1925	Gesell published his first account in a series of studies of behavioral development in infants and young children
	Institute of Child Development, University of Minnesota, established
	Series of Institutes on Child Welfare held to carry on research in child development, funded by Rockefeller Memorial (1925-30)
1926	National Association of Nursery Education organized